Artemide
ARCHITECTURAL

NODO-MASTER PRO

Led control interface - *Functions and utilization*
Interfaccia di controllo per Led - *Funzioni e utilizzo*
Interface de commande pour Led - *Fonctions et utilisation*
Steuerschnittstelle für Led - *Funktionen und Anwendung*
Interfaz de control para Led - *Funciones y utilización*

	IP20	**IP67**
	 Dim. 106 x 90 x 70 mm	 Dim. 310 x 168 x 90 mm
DALI	M077200	M077000
DALI / DMX	M077300	M077100

LANGUAGE INDEX

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1 – INTRODUCTION

The NODO-MASTER DALI or NODO-MASTER DALI/DMX purpose is to connect a DALI or DMX environment to Artemide fixtures supplying an ADSI (Artemide digital signal interface) controller.
Further to DALI or DMX bus, it is also possible to activate an internal self-rolling engine, or a push button driven interface.

The main characteristic of the 3 wires ADSI bus is to divide the power bus (feeding bus) from the command ones (digital bus). Between the limits of maximum power given by the power supply unit, and the constraints given by the section of feeding wires, it's possible to manage longer sections than using other 4 wires systems. Use of digital commands and particular circuit layouts permit to maintain a constant brightness between all fixtures belonging to one section, and there is no brightness change between last fixture of one section and first one of next section.

Another interesting characteristic is the possibility to share on same section different technology and/or function fixtures: RBG diffusing direct, monochrome power direct… In complex layouts, up to 8 independent channels are available on each section. Independently from products being available on the catalogue, here are some configuration examples along a section:
- Suspended fixtures, RGB diffusing direct emission (channels n. 1, 2, 3), white indirect emission (channel n. 8)
- Ceiling fixtures, RGB power direct emission (channels n. 1, 2, 3), blue diffusing direct emission (channel n. 4)
- Recessed floor fixtures, white diffusing direct emission (channel n. 4), RGB diffusing emission (channels n. 1, 2, 3)

Each used channel on ADSI bus corresponds to a used address on DALI or DMX bus.

NB: when NODO-MASTER DALI or NODO-MASTER DALI/DMX devices are used in DALI or DMX mode, they cannot self-generate any ADSI command. So they always need that commands like "on", "off", "dimming", "scenery recall"… be generated by the DALI or DMX environment. Consequently it's mandatory to preview on these buses the proper command devices.

NODO-MASTER DALI or NODO-MASTER DALI/DMX devices can self generate ADSI commands only in ROLLING or PUSHDIM mode, see paragraph 9 and 10.

Here below the term "NODO-MASTER" will be used for both "NODO-MASTER DALI" and "NODO-MASTER DALI/DMX". Should a function be present on only one device, it will be specified which one:
- NODO-MASTER DALI: i.e. NODO-MASTER DALI or NODO-MASTER DALI/DMX under DALI mode
- NODO-MASTER DMX: i.e. NODO-MASTER DALI/DMX under DMX mode.

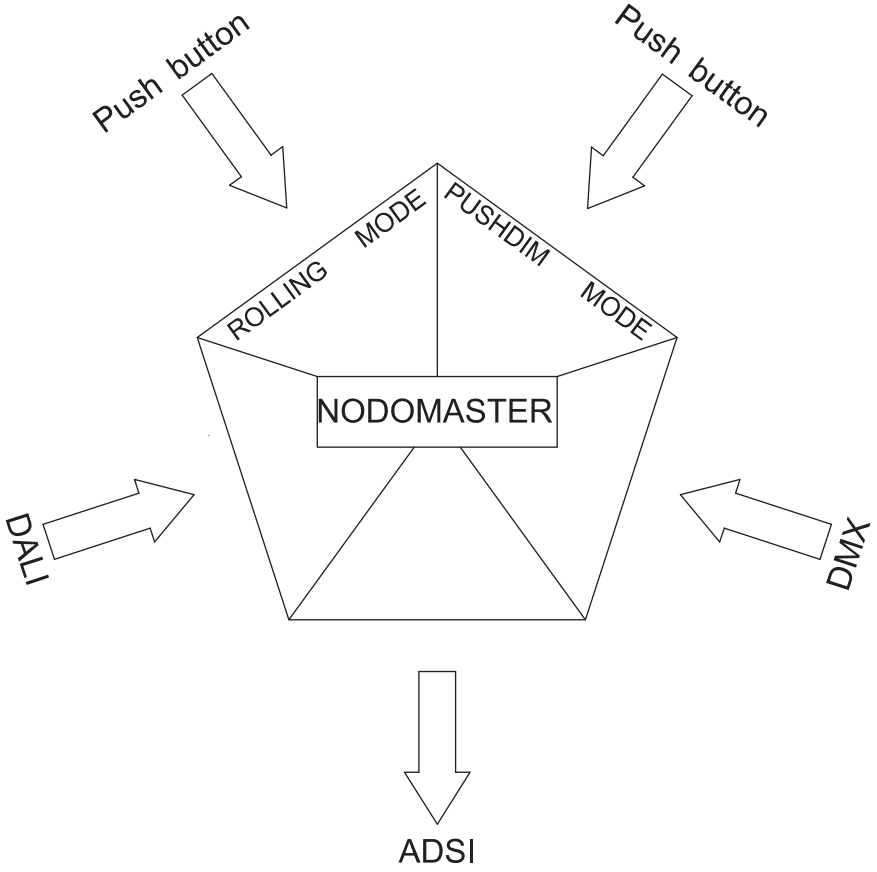


Fig. 1: *Nodo-Master interactions*

2 – FIXTURES LAYOUT, MANDATORY LIMITS

Here below some typical layouts, that can be used to connect ADSI fixtures to a NODO-MASTER.

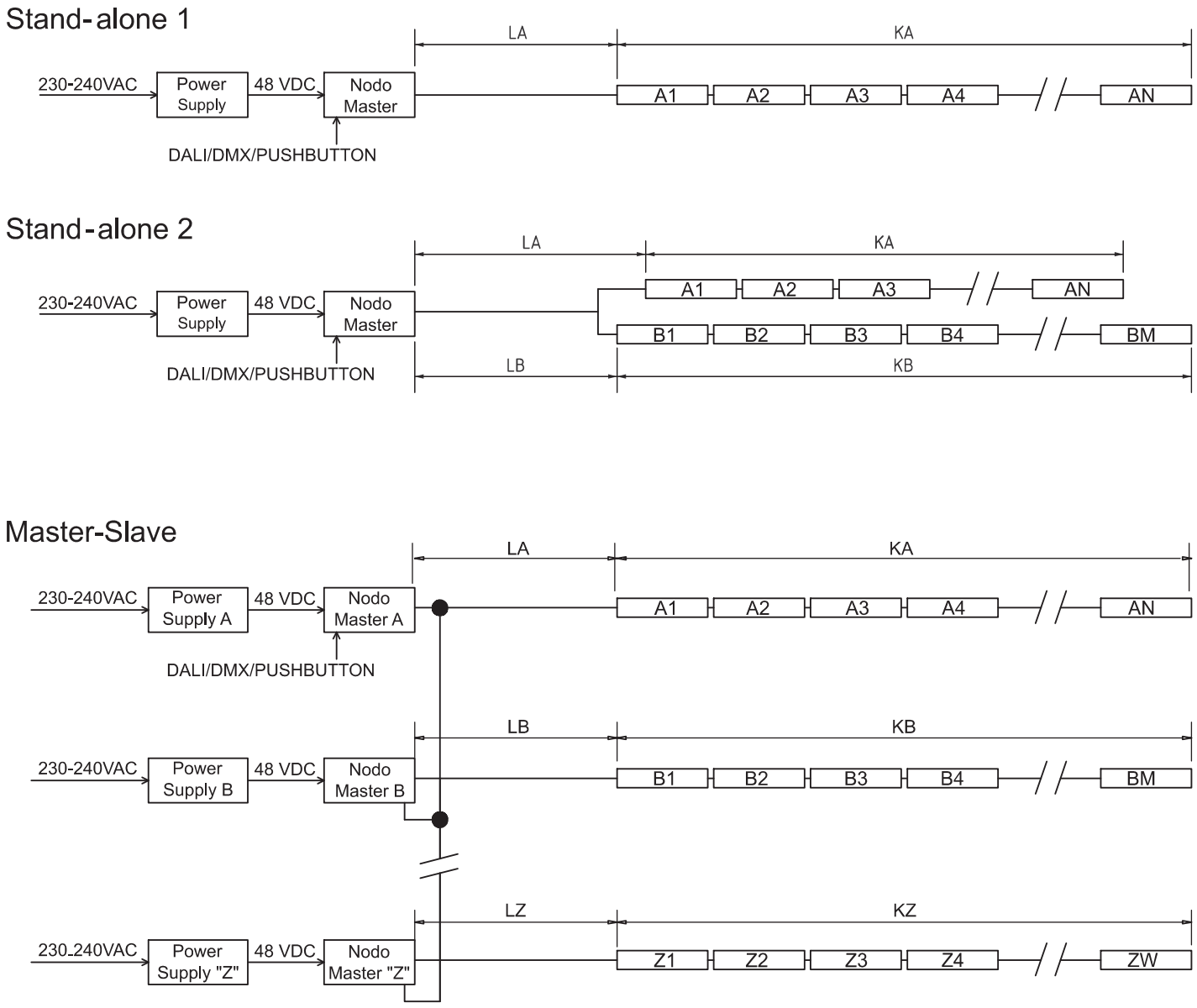


Fig. 2: *Typical layouts*

- "Stand-alone 1" layout: Power supply unit, NODO-MASTER: this is the simplest layout, the power supply unit and NODO-MASTER supply only one fixtures section.
- "Stand-alone 2" layout: Power supply unit, NODO-MASTER, two fixtures sections: this layout is used e.g. when NODO-MASTER is in the middle of a section
- "Master-Slave" layout: Power Supply 1, NODO-MASTER 1 for Section 1; Power Supply 2, NODO-MASTER 2 for Section 2…: in case of extremely long sections (longer than the NODO-MASTER limits) permits to synchronize each section to the others. NODO-MASTER 1 is the "master" (the only one recognized by DALI/DMX environment, so occupying addresses on the bus), all others are set as "slave" (they don't occupy addresses on DALI/DMX bus).

- Maximum power: generally, maximum power on one section is limited to 90% of the power supply unit feeding NODO-MASTER and the section. See Table 1 for advised gear power.

- Maximum number of fixtures on a section connected to a NODO-MASTER is 25. In the "master" section of a "Master Slave" layout, the number of "slave" NODO-MASTER has to be included into the 25 fixtures. So e.g. if there are 3 "slave" NODO-MASTER connected to the master, in the master section the maximum number of fixtures is limited to 25-3=22. See also Table 1 for limits.

- Maximum section length connected to a NODO-MASTER: provided that all fixtures are contiguous, without empty spaces between them, being L is the cable length between NODO-MASTER and 1st fixture of the section (in case Stand-alone 2, L=LA+LB) and K the total length of modules (in case Stand-alone 2, K=KA+KB), see Table 1 here below to determine K.

- Section length limits, maximum number of fixtures on same section, maximum power are related to the electrical characteristics of fixtures belonging to the section, and to the wire section-area used for passing through wiring. For these purposes, see also constraints reported on Artemide catalogue.

Type of installation	Type of module	Length of module (m)	Section of power feed cable (mm²)	L (Length of power feed cable) (m)	K max (Total length of modules) (m)	N. max number of modules	Gear power (W)
Floor	RGB	0.6	0.75	5	**12**	20	240
				10	**8.4**	14	
				15	**6.6**	11	
		0.9	0.75	5	**10.8**	12	240
				10	**9**	10	
				15	**7.2**	8	
			1.5	15	**10.8**	12	
			2.5	15	**12.6**	14	320
		1.2	1.5	5	**14.4**	12	320
				10	**12**	10	
				15	**10.8**	9	
			2.5	5	**14.4**	12	320
				10	**13.2**	11	
				15	**12**	10	
	White	0.6	0.75	15	**12**	20	100
		0.9	0.75	15	**9.9**	11	100
				5	**18**	20	240
				10	**16.2**	18	
				15	**13.5**	15	
		1.2	0.75	5	**20.4**	17	240
				10	**16.8**	14	
				15	**13.2**	11	
			1.5	15	**18**	15	
Suspension Ceiling Recessed	RGB	1.2	2.5	10	**15.6**	13	320
				15	**14.4**	12	
		2.4	2.5	10	**14.4**	6	320
				15	**12**	5	
	White	1.2	2.5	20	**9.6**	8	320
				30	**7.2**	6	240
		2.4	2.5	20	**9.6**	4	320

Table 1: *Layout constraints*

- See Fig. 3a and 3b for the connections to be performed on NODO-MASTER for each of the above mentioned layouts.

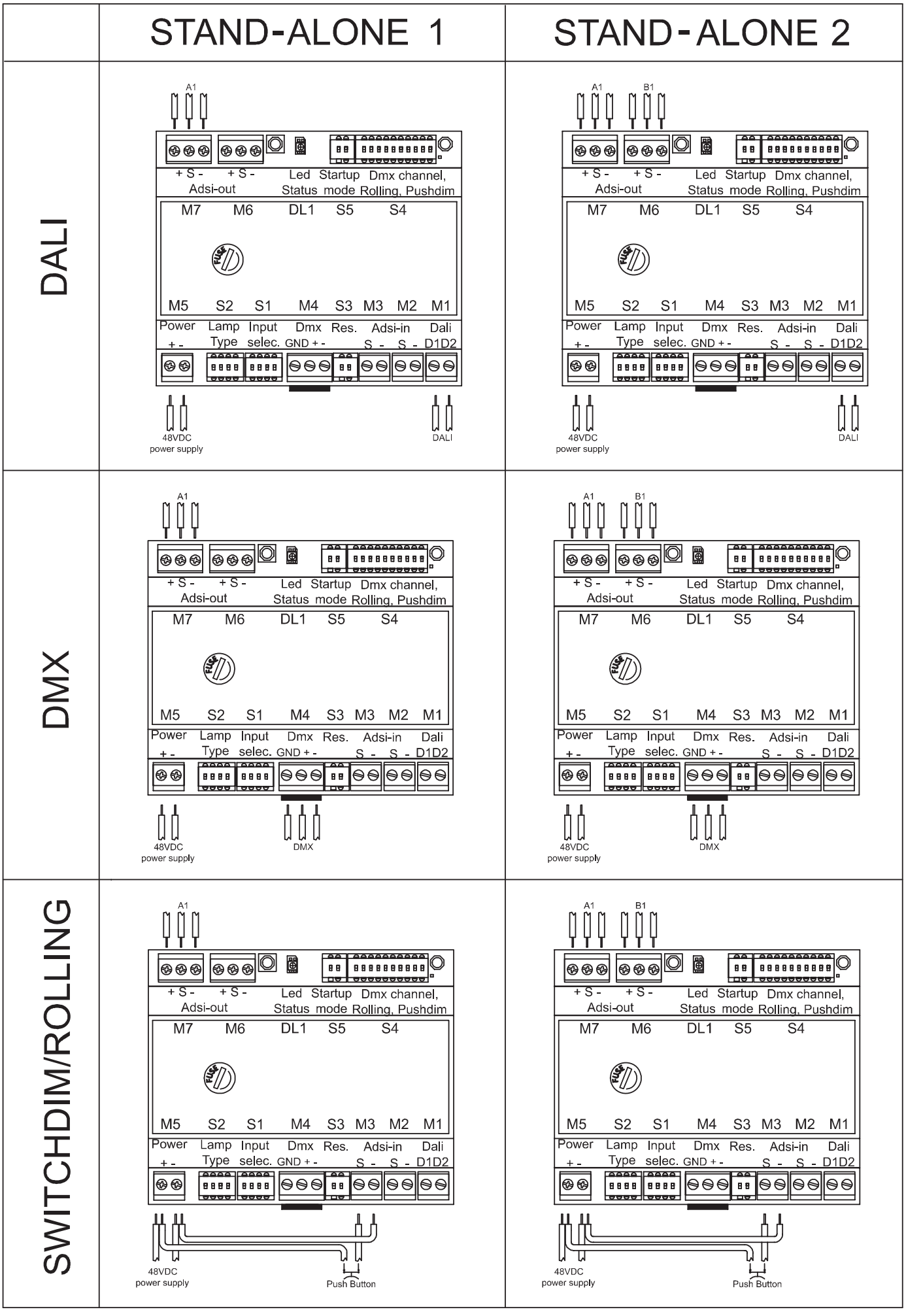


Fig. 3a: *Connections of the Nodo-Master for layout "Stand-alone 1" and "Stand-alone 2"*
(See also 6.2, 7.2, 8.2, 9.2 and 10.2 for dip-switches settings)

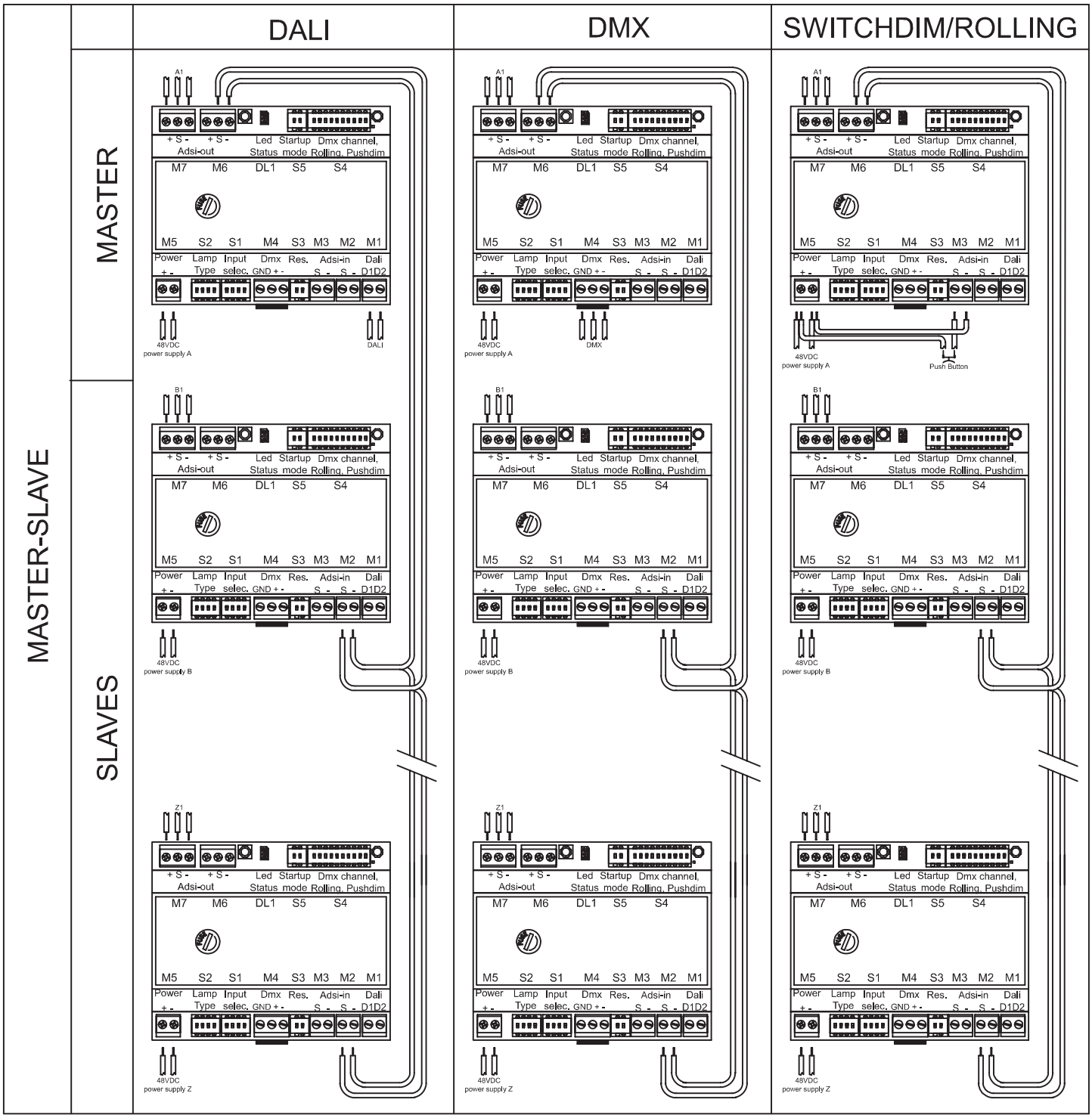


Fig. 3b: *Connections of the Nodo-Master for layout "Master-Slave"*
(See also 6.2, 7.2, 8.2, 9.2 and 10.2 for dip-switches settings)

3 – FUSES

A 10A retarded (T10) Ø5 x 20 mm fuse is present on front panel of NODO-MASTER, in order to protect the fixtures feeding line.

4 – POWER SUPPLY

Use constant tension power supplies advised by Artemide on its catalogue, under the environment and section power constraints (V_{OUT} = 48VDC, max 480W). NB: Artemide declines any responsibilities should power supplies be used not certified by Artemide.

5 – CABLES CHARACTERISTICS

Please refer to Fig. 4.

From power supply to NODO-MASTER (M5 terminal block): use wires compatible with the installation environment. Take this connection as shortest as possible, use minimum 2 x 2.5 mm². Possibly use cables already built-in into the power supply, should they be present.

From NODO-MASTER (M6 and M7 terminal blocks) to the 1st fixture of the section: if exist, use the code previewed on the catalogue (e.g. Algoritmo Floor Recessed, 3 x 0.75 mm²).
Otherwise use a 3-poles cable, environmentally compatible with the installation. This cable connection must be taken as shortest as possible, minimum advised wire section is 3 x 1.5 mm² (better 3 x 2.5 mm²). Respect the polarity "+", "-", "S" shown on the cable and on terminal blocks.

From DALI bus to NODO-MASTER (M1 terminal block): calculate the maximum distance between the Dali control unit (e.g. Touch Panel, Group Controller, Scene Controller, …) and the most far actuating device, including NODO-MASTER: use wires sections greater than 0.5 mm² for distance up to 100 m, greater than 0.75 mm² for distance up to 150 m, greater than 1,5 mm² for longer distances. Maximum distance cannot exceed 300 m. DALI bus is not polarized.

From DMX bus to NODO-MASTER (M4 terminal block, only for NODO-MASTER DMX): use a twisted pair cable, e.g. a CAT5 cable. Make connection as shown in one of the two schematics on Fig. 5. Respect the polarity "GND", "+", "-".

Connections for "Master-Slave" layout between M2 and M6 terminal blocks: use minimum 2 x 0.5 mm², connect "–" and "S" poles on M6 or M7 of "Master" NODO-MASTER to same poles on M2 o M3 of "Slave" NODO-MASTER, respecting the polarity.

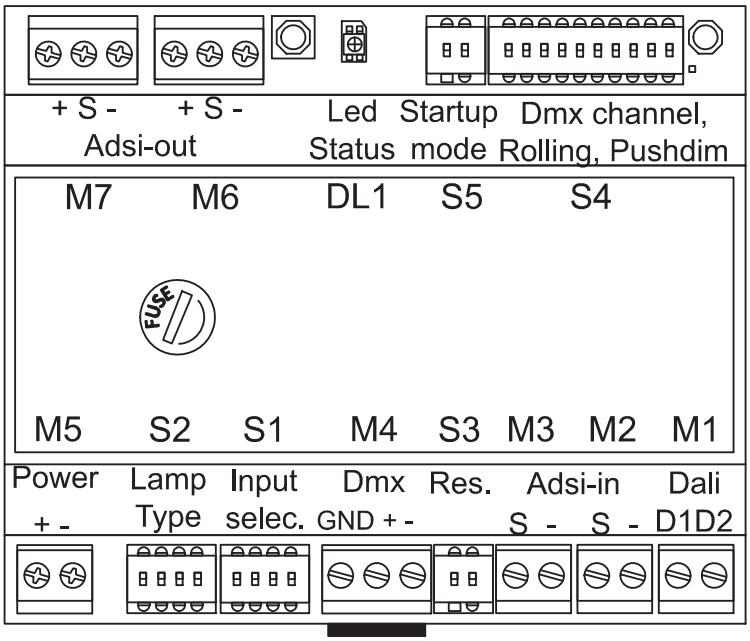


Fig. 4: *Terminal block layout of Nodo-Master*
(See also 6.2, 7.2, 8.2, 9.2 and 10.2 for dip-switches settings)

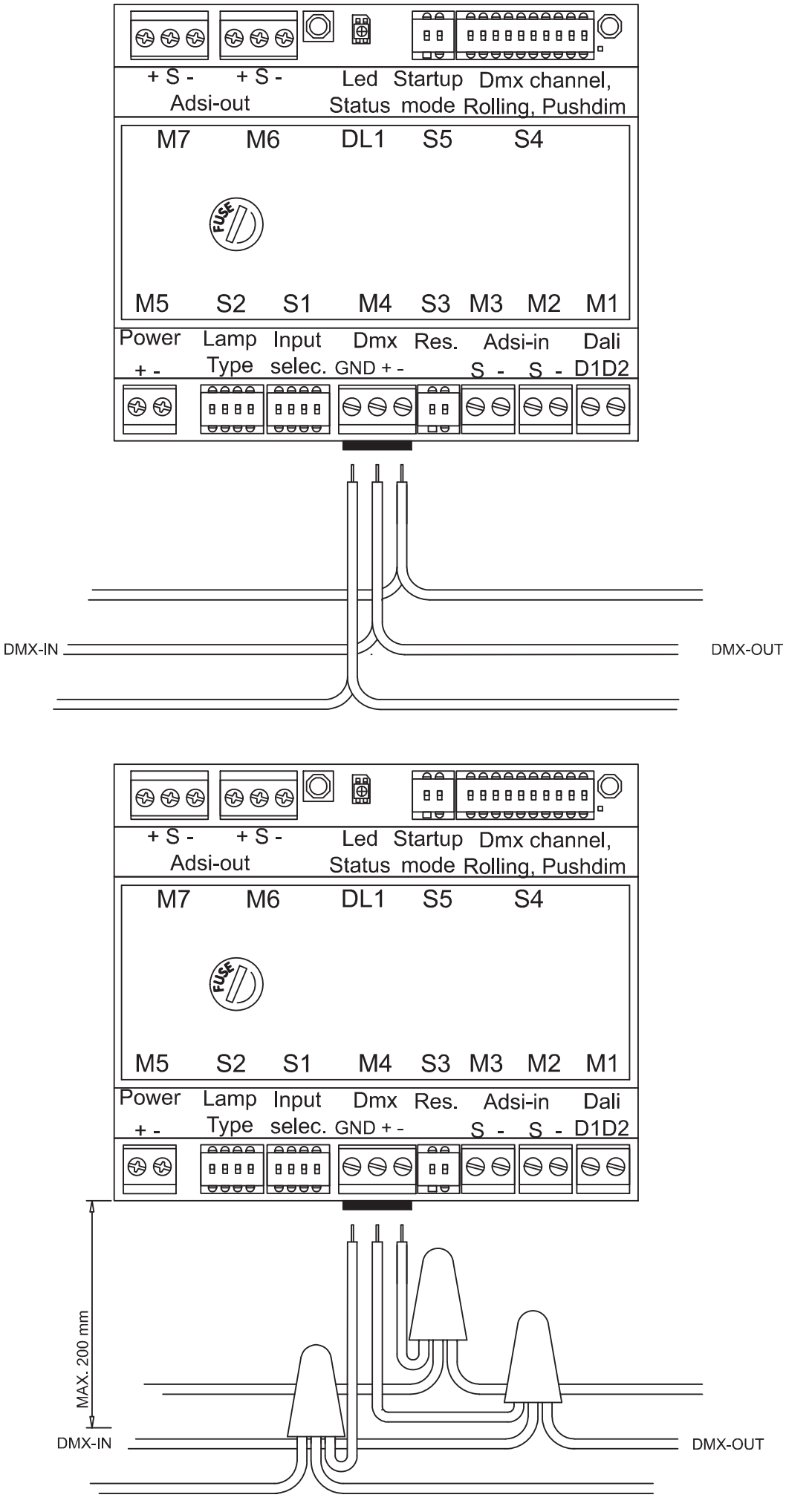


Fig. 5: *Connections of bus DMX*

6 – SETTING NODO-MASTER TO “DALI” MODE

6-1 - CONNECTIONS

Use cables as shown in paragraph 5. Refer to Fig. 3a and 3b.

Connect cables from DALI bus to M1 terminal block.
Connect feeding cables from power supply to M5 terminal block, respecting the polarity.
Connect the cable toward the fixtures to M6 terminal block, respecting the polarity.
In case of “Master-Slave” layout, connect “–“ and “S” on M7 of “Master” NODO-MASTER DALI to “–“ and “S” on M2 of “Slave” NODO-MASTER, respecting the polarity, Fig. 3b.

6.2 - DIP-SWITCHES SETTINGS FOR DALI MODE

Please refer to Fig. 6.

To set the bus type, locate S1 dip-switches. To set DALI bus:
S1-1: OFF
S1-2: ON
S1-3: OFF
S1-4: OFF

To set the reserved addresses number on the bus, locate S2 dip-switches:
- If on the section connected to the NODO-MASTER under setting are present only RGB direct fixtures, NODO-MASTER DALI occupies 3 addresses. Set S2 dip-switches as below:
  S2-1: ON
  S2-2: OFF
  S2-3: OFF
  S2-4: OFF

- If on the section connected to the NODO-MASTER under setting are present only monochrome (only white, only red, only green, only blue, only amber) direct fixtures, NODO-MASTER DALI occupies 1 address. Set S2 dip-switches as below:
  S2-1: OFF
  S2-2: ON
  S2-3: OFF
  S2-4: OFF

- If on the section connected to the NODO-MASTER under setting are present RGB and/or monochrome and/or different typology (direct and indirect) fixtures, set S2 dip-switches as per actual situation, NODO-MASTER DALI occupies N addresses as per attached Table 2 (where ON = fixtures are present, OFF = fixtures are NOT present):

Total occupied Addresses	S2-1 (DIRECT RGB)	S2-2 (DIRECT MONOCHROME)	S2-3 (INDIRECT RGB)	S2-4 (INDIRECT MONOCHROME)
1	OFF	ON	OFF	OFF
1	OFF	OFF	OFF	ON
2	OFF	ON	OFF	ON
3	ON	OFF	OFF	OFF
3	OFF	OFF	ON	OFF
4	ON	ON	OFF	OFF
4	OFF	OFF	ON	ON
4	ON	OFF	OFF	ON
4	OFF	ON	ON	OFF
6	ON	OFF	ON	OFF
7	ON	ON	ON	OFF
7	ON	OFF	ON	ON
8	ON	ON	ON	ON

Table 2: *settings of dip-switches S2*

NB: due to the limited number of addresses (64) managed by DALI protocol, it’s advised to always set the minimum number of addresses, compatibly with layout requirements.

S3 and S4 are meaningless under NODO-MASTER DALI mode.

6.3 - COMPLEX PLANTS AND ADDRESSES MANAGEMENT

Suppose to have two sections, each connected to a NODO-MASTER DALI, and that is necessary to synchronize the colours of both sections. If the two sections are far between them, and so it's difficult to use a "master-slave" layout, it's necessary to group DALI addresses by means of "group controllers" into "groups" (max 16), as previewed by DALI standard.

For example, under the simple case only RGB fixtures, we could have (please note that the address number can be seen only using a DALI-PC interface or on some DALI Control Panel):

NODO-MASTER DALI N. 1:
R = address n. 1
G = address n. 2
B = address n. 3

NODO-MASTER DALI N. 2:
R = address n. 4
G = address n. 5
B = address n. 6.

Following the specific Group Controller (or Control Panel) procedure, add each address to the proper DALI group:
Group 1 (RED): address n. 1, address n. 4
Group 2 (GREEN): address n. 2, address n. 5
Group 3 (BLUE): address n. 3, address n. 6.

The 3 groups will be managed by means of sceneries (max 16) as per DALI standard, using "sceneries controllers". Several sceneries can be recalled from "sequences", if previewed by used DALI Control Panel.

Due to the fact that DALI protocol assigns addresses in random mode to the devices found along the bus (including NODO-MASTER), could happen that addresses assigned to a NODO-MASTER are not contiguous and/or in desired order.

In such a case, we could find, having the same previous example:

NODO-MASTER DALI N. 1:
R = address n. 6
G = address n. 2
B = address n. 3

NODO-MASTER DALI N. 2:
R = address n. 1
G = address n. 4
B = address n. 5.

In this case, add DALI addresses to DALI groups as follows:
Group 1 (RED): address n. 6, address n. 1
Group 2 (GREEN): address n. 2, address n. 4
Group 3 (BLUE): address n. 3, address n. 5

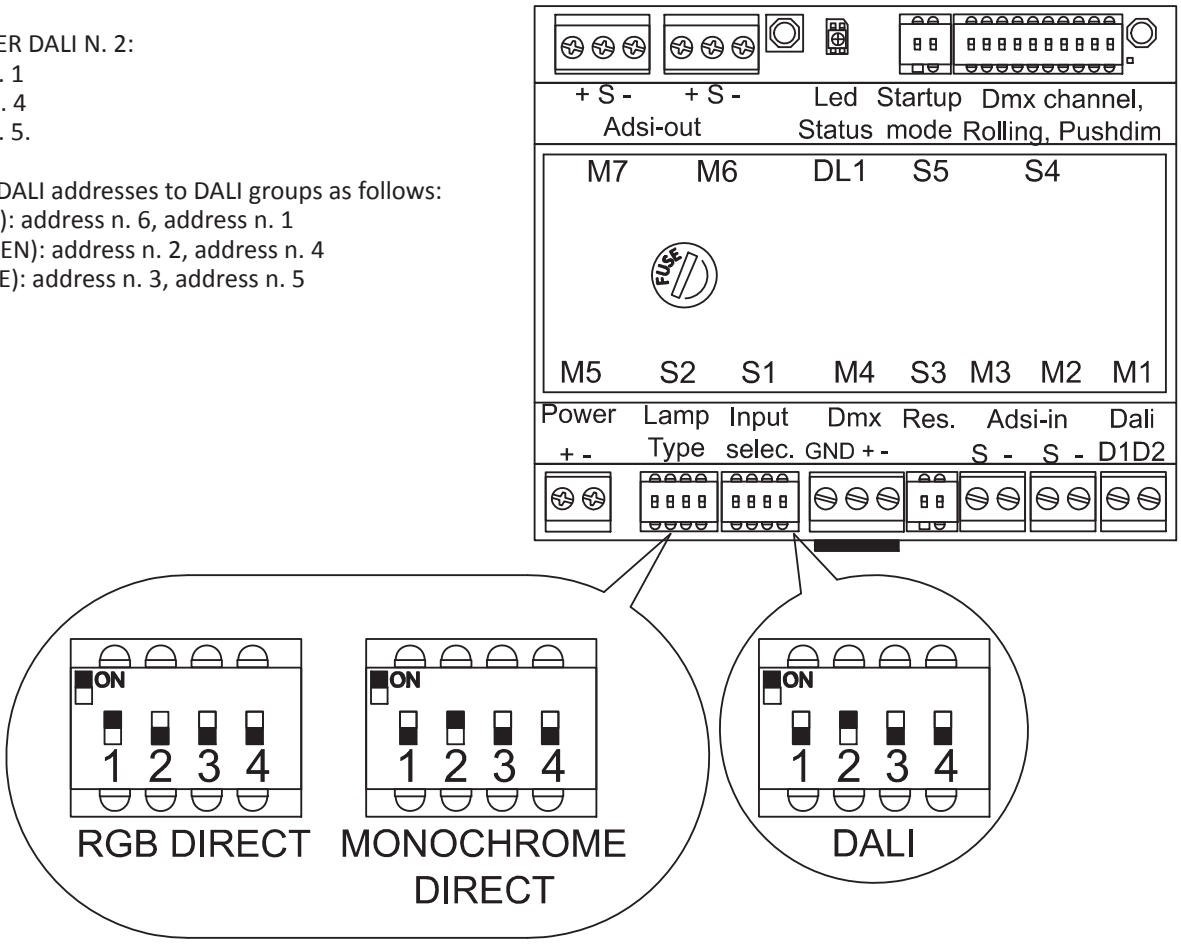


Fig. 6: *Settings of dip-switches S2 in "Dali" mode,*
See also Table 2 in chapter 6.2 for other fixtures combinations

7 – SETTING NODO-MASTER TO “DMX” MODE

7-1 - CONNECTIONS

Use cables as shown in paragraph 5. Refer to fig. 3a and 3b.
Connect cables from DMX bus to M4 terminal block, respecting the polarity. Use one of the two ways shown in fig. 5.
Connect feeding cables from power supply to M5 terminal block, respecting the polarity.
Connect the cable toward the fixtures to M6 terminal block, respecting the polarity.
In case of “Master-Slave” layout, connect “–“ and “S” on M7 of “Master” NODO-MASTER DMX to “–“ and “S” on M2 of “Slave” NODO-MASTER, respecting the polarity, fig. 3b.

7.2 - DIP-SWITCHES SETTINGS FOR DMX MODE

Please refer to fig. 7.

To set the bus type, locate S1 dip-switches. To set DMX bus:
S1-1: ON
S1-2: OFF
S1-3: OFF
S1-4: OFF

To set the reserved addresses number on the bus, locate S2 dip-switches:

- If on the section connected to the NODO-MASTER under setting are present only RGB direct fixtures, NODO-MASTER DMX occupies 3 addresses. Set S2 dip-switches as below:
  S2-1: ON
  S2-2: OFF
  S2-3: OFF
  S2-4: OFF.

- If on the section connected to the NODO-MASTER under setting are present only monochrome (only white, only red, only green, only blue, only amber) direct fixtures, NODO-MASTER DMX occupies 1 address. Set S2 dip-switches as below:
  S2-1: OFF
  S2-2: ON
  S2-3: OFF
  S2-4: OFF.

- If on the section connected to the NODO-MASTER under setting are present RGB and/or monochrome and/or different typology (direct and indirect) fixtures, set S2 dip-switches as per actual situation, NODO-MASTER DMX occupies N addresses as per attached table n. 2 (where ON = fixtures are present, OFF = fixtures are NOT present).

To activate the internal DMX terminating resistance, locate S3 dip-switches.
As per DMX standard, last device connected to a DMX bus must have a 120 Ω resistance between its “+” e “–“. This resistance can be internally activated on a NODO-MASTER DMX by setting S3-1 to ON.

To set DMX address, locate S4 dip-switches.
On a DMX bus, each device must have a unique address ranging between 1 and 511.
Following the addresses number occupied by a NODO-MASTER DMX (see S2 dip-switch value on Table n. 2), choose a free address for each NODO-MASTER DMX, and assign to it using S4 dip-switches.
Switches from S4-1 to S4-9 are used to select the DMX starting address occupied by NODO-MASTER DMX. See following Table n. 3, using binary coding, 0 = OFF, 1 = ON.

DMX Address	DIP-switch n.									
	10	9	8	7	6	5	4	3	2	1
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
2	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
3	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
4	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
5	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
6	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF
7	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
8	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
9	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
10	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF
11	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
12	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
13	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
14	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
15	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON
16	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
17	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
18	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF
19	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
20	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
21	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
22	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
23	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON
24	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
25	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
26	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF
27	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON
28	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
29	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON
30	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF
31	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON
32	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
33	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
34	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
35	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
36	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
37	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
38	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
39	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON
40	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
41	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
42	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF
43	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON
44	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
45	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON
46	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF
47	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON
48	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
49	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
50	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF
51	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON
52	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
53	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON
54	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF
55	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON
56	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
57	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON
58	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF
59	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON
60	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF
61	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON
62	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF
63	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON

DMX Address	DIP-switch n.									
	10	9	8	7	6	5	4	3	2	1
64	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
65	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
66	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF
67	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON
68	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
69	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
70	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF
71	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON
72	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
73	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON
74	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF
75	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON
76	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
77	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON
78	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF
79	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON
80	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
81	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON
82	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF
83	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON
84	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
85	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON
86	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF
87	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON
88	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
89	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON
90	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF
91	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON
92	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF
93	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON
94	OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF
95	OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON	ON
96	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
97	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON
98	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF
99	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON
100	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
101	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON
102	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF
103	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON
104	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
105	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON
106	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF
107	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON
108	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF
109	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON
110	OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF
111	OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON	ON
112	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
113	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON
114	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF
115	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON
116	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF
117	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON
118	OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF
119	OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON	ON
120	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF
121	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON
122	OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF
123	OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON	ON
124	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF
125	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF	ON
126	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF
127	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON

Table 3-1: *DMX address setting*

DMX Address	DIP-switch n.									
	10	9	8	7	6	5	4	3	2	1
128	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
129	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
130	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF
131	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON
132	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
133	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON
134	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF
135	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON
136	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
137	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON
138	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF
139	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON
140	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
141	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON
142	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF
143	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON
144	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
145	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON
146	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF
147	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON
148	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
149	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON
150	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF
151	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON
152	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
153	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON
154	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF
155	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON
156	OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF
157	OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON
158	OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF
159	OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON	ON
160	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
161	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON
162	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF
163	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON
164	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
165	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON
166	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF
167	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON
168	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
169	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON
170	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF
171	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON
172	OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF
173	OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON
174	OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF
175	OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON	ON
176	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
177	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON
178	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF
179	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON
180	OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF
181	OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON
182	OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF
183	OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON	ON
184	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF
185	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON
186	OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF
187	OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON	ON
188	OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF
189	OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF	ON
190	OFF	OFF	ON	OFF	ON	ON	ON	ON	ON	OFF
191	OFF	OFF	ON	OFF	ON	ON	ON	ON	ON	ON

DMX Address	DIP-switch n.									
	10	9	8	7	6	5	4	3	2	1
192	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
193	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
194	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF
195	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON
196	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
197	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON
198	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF
199	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON
200	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
201	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON
202	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF
203	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON
204	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF
205	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON
206	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF
207	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON	ON
208	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
209	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON
210	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF
211	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON
212	OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF
213	OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON
214	OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF
215	OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON	ON
216	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF
217	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON
218	OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF
219	OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON	ON
220	OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF
221	OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF	ON
222	OFF	OFF	ON	ON	OFF	ON	ON	ON	ON	OFF
223	OFF	OFF	ON	ON	OFF	ON	ON	ON	ON	ON
224	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
225	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON
226	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF
227	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON
228	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF
229	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON
230	OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF
231	OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON	ON
232	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF
233	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON
234	OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF
235	OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON	ON
236	OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF
237	OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF	ON
238	OFF	OFF	ON	ON	ON	OFF	ON	ON	ON	OFF
239	OFF	OFF	ON	ON	ON	OFF	ON	ON	ON	ON
240	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF
241	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON
242	OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF
243	OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON	ON
244	OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF
245	OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF	ON
246	OFF	OFF	ON	ON	ON	ON	OFF	ON	ON	OFF
247	OFF	OFF	ON	ON	ON	ON	OFF	ON	ON	ON
248	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF
249	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF	ON
250	OFF	OFF	ON	ON	ON	ON	ON	OFF	ON	OFF
251	OFF	OFF	ON	ON	ON	ON	ON	OFF	ON	ON
252	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF
253	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF	ON
254	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	OFF
255	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	ON

Table 3-2: *DMX address setting*

DMX Address	DIP-switch n.									
	10	9	8	7	6	5	4	3	2	1
256	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
257	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
258	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
259	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
260	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
261	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
262	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF
263	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
264	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
265	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
266	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF
267	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
268	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
269	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
270	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
271	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON
272	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
273	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
274	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF
275	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
276	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
277	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
278	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
279	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON	ON
280	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
281	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
282	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON	OFF
283	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON	ON
284	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
285	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF	ON
286	OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON	OFF
287	OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON	ON
288	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
289	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
290	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
291	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
292	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
293	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
294	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
295	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON	ON
296	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
297	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
298	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON	OFF
299	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON	ON
300	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
301	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF	ON
302	OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON	OFF
303	OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON	ON
304	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
305	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
306	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON	OFF
307	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON
308	OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
309	OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF	ON
310	OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON	OFF
311	OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON	ON
312	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
313	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF	ON
314	OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON	OFF
315	OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON	ON
316	OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF	OFF
317	OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF	ON
318	OFF	ON	OFF	OFF	ON	ON	ON	ON	ON	OFF
319	OFF	ON	OFF	OFF	ON	ON	ON	ON	ON	ON

DMX Address	DIP-switch n.									
	10	9	8	7	6	5	4	3	2	1
320	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
321	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
322	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF
323	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	ON
324	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
325	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
326	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON	OFF
327	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON	ON
328	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
329	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	ON
330	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON	OFF
331	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON	ON
332	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
333	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF	ON
334	OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON	OFF
335	OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON	ON
336	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
337	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	ON
338	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON	OFF
339	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON	ON
340	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
341	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON
342	OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON	OFF
343	OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON	ON
344	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
345	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF	ON
346	OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON	OFF
347	OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON	ON
348	OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF	OFF
349	OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF	ON
350	OFF	ON	OFF	ON	OFF	ON	ON	ON	ON	OFF
351	OFF	ON	OFF	ON	OFF	ON	ON	ON	ON	ON
352	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
353	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	ON
354	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON	OFF
355	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON	ON
356	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
357	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	ON
358	OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON	OFF
359	OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON	ON
360	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
361	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF	ON
362	OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON	OFF
363	OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON	ON
364	OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF	OFF
365	OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF	ON
366	OFF	ON	OFF	ON	ON	OFF	ON	ON	ON	OFF
367	OFF	ON	OFF	ON	ON	OFF	ON	ON	ON	ON
368	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
369	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF	ON
370	OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON	OFF
371	OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON	ON
372	OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF	OFF
373	OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF	ON
374	OFF	ON	OFF	ON	ON	ON	OFF	ON	ON	OFF
375	OFF	ON	OFF	ON	ON	ON	OFF	ON	ON	ON
376	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF	OFF
377	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF	ON
378	OFF	ON	OFF	ON	ON	ON	ON	OFF	ON	OFF
379	OFF	ON	OFF	ON	ON	ON	ON	OFF	ON	ON
380	OFF	ON	OFF	ON	ON	ON	ON	ON	OFF	OFF
381	OFF	ON	OFF	ON	ON	ON	ON	ON	OFF	ON
382	OFF	ON	OFF	ON	ON	ON	ON	ON	ON	OFF
383	OFF	ON	OFF	ON	ON	ON	ON	ON	ON	ON

Table 3-3: *DMX address setting*

DMX Address	DIP-switch n.									
	10	9	8	7	6	5	4	3	2	1
384	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
385	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
386	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF
387	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	ON
388	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
389	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	ON
390	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON	OFF
391	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON
392	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
393	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	ON
394	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON	OFF
395	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON	ON
396	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
397	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	ON
398	OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON	OFF
399	OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON	ON
400	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
401	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	ON
402	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON	OFF
403	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON	ON
404	OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
405	OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF	ON
406	OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON	OFF
407	OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON	ON
408	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
409	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON
410	OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON	OFF
411	OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON	ON
412	OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF	OFF
413	OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF	ON
414	OFF	ON	ON	OFF	OFF	ON	ON	ON	ON	OFF
415	OFF	ON	ON	OFF	OFF	ON	ON	ON	ON	ON
416	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
417	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	ON
418	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON	OFF
419	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON	ON
420	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
421	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF	ON
422	OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON	OFF
423	OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON	ON
424	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
425	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF	ON
426	OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON	OFF
427	OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON	ON
428	OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF	OFF
429	OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF	ON
430	OFF	ON	ON	OFF	ON	OFF	ON	ON	ON	OFF
431	OFF	ON	ON	OFF	ON	OFF	ON	ON	ON	ON
432	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
433	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF	ON
434	OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON	OFF
435	OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON	ON
436	OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF	OFF
437	OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF	ON
438	OFF	ON	ON	OFF	ON	ON	OFF	ON	ON	OFF
439	OFF	ON	ON	OFF	ON	ON	OFF	ON	ON	ON
440	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF	OFF
441	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF	ON
442	OFF	ON	ON	OFF	ON	ON	ON	OFF	ON	OFF
443	OFF	ON	ON	OFF	ON	ON	ON	OFF	ON	ON
444	OFF	ON	ON	OFF	ON	ON	ON	ON	OFF	OFF
445	OFF	ON	ON	OFF	ON	ON	ON	ON	OFF	ON
446	OFF	ON	ON	OFF	ON	ON	ON	ON	ON	OFF
447	OFF	ON	ON	OFF	ON	ON	ON	ON	ON	ON

DMX Address	DIP-switch n.									
	10	9	8	7	6	5	4	3	2	1
448	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
449	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
450	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON	OFF
451	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON
452	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
453	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF	ON
454	OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON	OFF
455	OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON	ON
456	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
457	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF	ON
458	OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON	OFF
459	OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON	ON
460	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF
461	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF	ON
462	OFF	ON	ON	ON	OFF	OFF	ON	ON	ON	OFF
463	OFF	ON	ON	ON	OFF	OFF	ON	ON	ON	ON
464	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
465	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF	ON
466	OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON	OFF
467	OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON	ON
468	OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF	OFF
469	OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF	ON
470	OFF	ON	ON	ON	OFF	ON	OFF	ON	ON	OFF
471	OFF	ON	ON	ON	OFF	ON	OFF	ON	ON	ON
472	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF	OFF
473	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF	ON
474	OFF	ON	ON	ON	OFF	ON	ON	OFF	ON	OFF
475	OFF	ON	ON	ON	OFF	ON	ON	OFF	ON	ON
476	OFF	ON	ON	ON	OFF	ON	ON	ON	OFF	OFF
477	OFF	ON	ON	ON	OFF	ON	ON	ON	OFF	ON
478	OFF	ON	ON	ON	OFF	ON	ON	ON	ON	OFF
479	OFF	ON	ON	ON	OFF	ON	ON	ON	ON	ON
480	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
481	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON
482	OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON	OFF
483	OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON	ON
484	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF	OFF
485	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF	ON
486	OFF	ON	ON	ON	ON	OFF	OFF	ON	ON	OFF
487	OFF	ON	ON	ON	ON	OFF	OFF	ON	ON	ON
488	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF	OFF
489	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF	ON
490	OFF	ON	ON	ON	ON	OFF	ON	OFF	ON	OFF
491	OFF	ON	ON	ON	ON	OFF	ON	OFF	ON	ON
492	OFF	ON	ON	ON	ON	OFF	ON	ON	OFF	OFF
493	OFF	ON	ON	ON	ON	OFF	ON	ON	OFF	ON
494	OFF	ON	ON	ON	ON	OFF	ON	ON	ON	OFF
495	OFF	ON	ON	ON	ON	OFF	ON	ON	ON	ON
496	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF
497	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF	ON
498	OFF	ON	ON	ON	ON	ON	OFF	OFF	ON	OFF
499	OFF	ON	ON	ON	ON	ON	OFF	OFF	ON	ON
500	OFF	ON	ON	ON	ON	ON	OFF	ON	OFF	OFF
501	OFF	ON	ON	ON	ON	ON	OFF	ON	OFF	ON
502	OFF	ON	ON	ON	ON	ON	OFF	ON	ON	OFF
503	OFF	ON	ON	ON	ON	ON	OFF	ON	ON	ON
504	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF
505	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF	ON
506	OFF	ON	ON	ON	ON	ON	ON	OFF	ON	OFF
507	OFF	ON	ON	ON	ON	ON	ON	OFF	ON	ON
508	OFF	ON	ON	ON	ON	ON	ON	ON	OFF	OFF
509	OFF	ON	ON	ON	ON	ON	ON	ON	OFF	ON
510	OFF	ON	ON	ON	ON	ON	ON	ON	ON	OFF
511	OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON

Table 3-4: *DMX address setting*

NB: please note that on S4 dip-switch, n. 1 is the rightmost one, 10 the leftmost and that ON is bottom side!

NB: note that:

DMX Address	DIP-switch n.									
	10	9	8	7	6	5	4	3	2	1
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON

are both related to address n. 1.

NB: S4-10 is not used, and must be always set to OFF.

Example:
NODO-MASTER DMX N. 1 set to DIRECT RGB, NODO-MASTER DMX N. 2 set to DIRECT MONOCHROME, NODO-MASTER DMX N. 3 set to INDIRECT MONOCHROME:

NODO-MASTER DMX N. 1
S4 is set e.g. on address n. 5, so ON-OFF-ON-OFF-OFF-OFF-OFF-OFF-OFF-OFF
S2 is set to: ON-OFF-OFF-OFF, uses 3 addresses

NODO-MASTER DMX N. 2
S4 must be set on address n. 8 (NODO-MASTER DMX N.1 on S4 value + NODO-MASTER DMX N.1 on S2 value).
So S4 is set to: OFF-OFF-OFF-ON-OFF-OFF-OFF-OFF-OFF-OFF
S2 is set to: OFF-ON-OFF-OFF, uses 1 address

NODO-MASTER DMX N. 3
S4 must be set on address n. 9 (NODO-MASTER DMX N.2 on S4 value + NODO-MASTER DMX N. 2 on S2 value).
So S4 is set to: ON-OFF-OFF-ON-OFF-OFF-OFF-OFF-OFF-OFF
S2 is set to: OFF-OFF-OFF-ON, uses 1 address

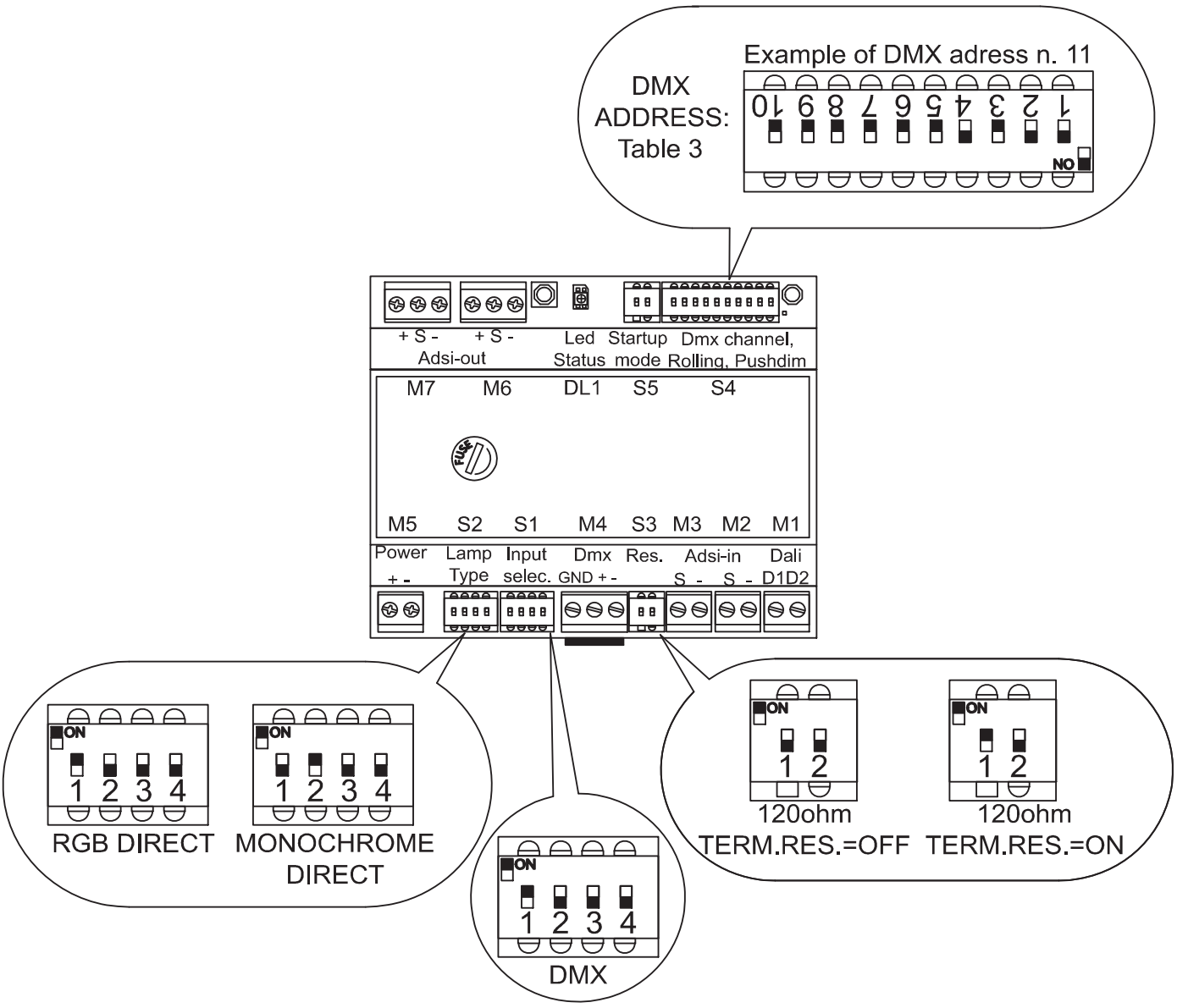


Fig. 7: *Settings of dip-switches in "DMX" mode*
See also Table 2 in chapter 6.2 for different fixtures combinations and Table 3 in chapter 7.2 for DMX address-settings

8 – SETTING NODO-MASTER TO “SLAVE” MODE

8-1 - CONNECTIONS

Use cables as shown in paragraph 5. Refer to fig. 3b.
Connect feeding cables from power supply to M5 terminal block, respecting the polarity.
Connect the cable toward the fixtures to M6 terminal block, respecting the polarity.
Connect “–“ and “S” on M7 of “Master” NODO-MASTER to “–“ and “S” on M2 of “Slave” NODO-MASTER, respecting the polarity.
On “slave” NODO-MASTER do NOT connect either M1 to DALI bus or M4 to DMX bus.

8.2 - DIP-SWITCHES SETTINGS FOR SLAVE MODE

Please refer to fig. 8.

To set the bus type, locate S1 dip-switches. To set SLAVE:
S1-1: OFF
S1-2: OFF
S1-3: ON
S1-4: OFF

To set S2: copy on “Slave” NODO-MASTER the setting used on “Master” NODO-MASTER to whom “Slave” NODO-MASTER is connected to. Addresses set on “Slave” NODO-MASTER are NOT occupied on DALI or DMX buses.

S3 and S4 are meaningless under “Slave” NODO-MASTER mode.

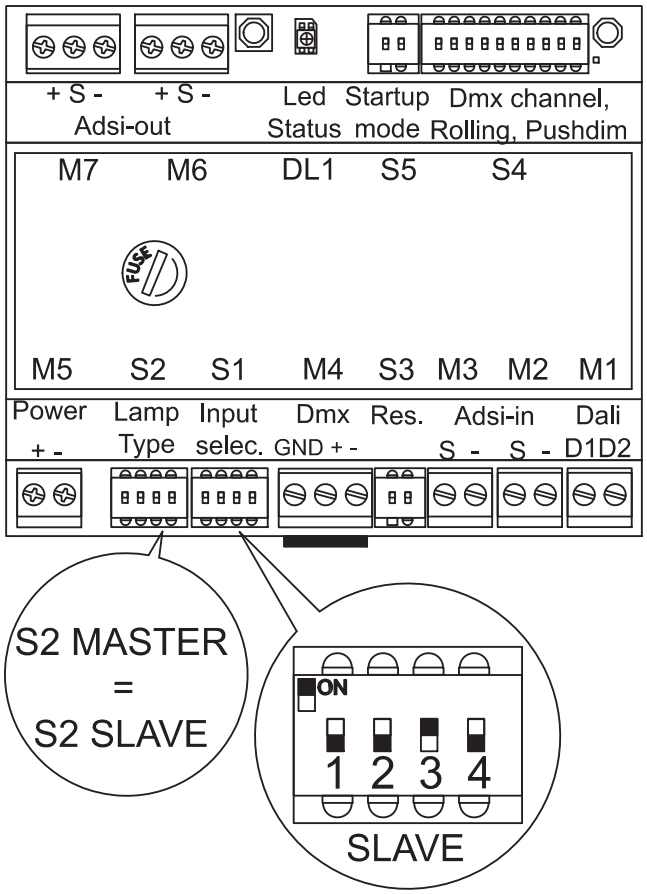


Fig. 8: *Settings of dip-switches in “SLAVE” mode*

9 – SETTING NODO-MASTER TO “ROLLING” MODE

9.0 - INTRODUCTION

“ROLLING” mode can be used in simple installations to drive the system without the needing to have an external DALI or DMX environment.
In this functioning mode, it is possible:

- To choose the colours on which to perform the rolling: even if the system is composed by RGB modules, it is possible to activate only desired colours to belong to the rolling set (e.g. in a RGB system it is possible to exclude GREEN and leave only RED and BLU to roll)
- To choose rolling speed
- By means of a push-button it is possible to switch on and off the system and to start and stop the rolling.

Under this mode, NODO-MASTER self-generates a command sequence, necessary to switch-on, switch-off and dim all fixtures typologies. Provided that the following “colours” are present along the section and correctly activated by means of S4 dip-switches, the order used during test is the following:

Direct RGB, in the order red, green, blue
Direct Monochrome (white, red, green, blue, amber)
Indirect RGB, in the order red, green, blue
Indirect Monochrome (white, red, green, blue, amber).

ROLLING mode can be also used in order to test the system, before activating the DALI or DMX environment: if all the modules works well in rolling mode, the reason to any malfunction should happen after DALI or DMX activation, has to be searched on the DALI or DMX bus and/or NODOMASTER addressing.

9.1 - CONNECTIONS

Use cables as shown in paragraph 5. Refer to fig. 3a and 3b.
Connect cables from push-button to M3-M5 terminal blocks.
NB: use a normally open push-button to short circuit “+”on M3 and M5 terminal blocks.
Connect feeding cables from power supply to M5 terminal block, respecting the polarity.
Connect the cable toward the fixtures to M6 terminal block, respecting the polarity.
In case of “Master-Slave” layout, connect “–“ and “S” on M7 of “Master” NODO-MASTER DMX to “–“ and “S” on M2 of “Slave” NODO-MASTER, respecting the polarity, fig. 3b.

9.2 - DIP-SWITCHES SETTINGS FOR ROLLING MODE

Please refer to fig. 9.

To set the ROLLING mode, locate S1 dip-switches, and set them on each stand alone NODO-MASTER or “Master” NODO-MASTER (do NOT set S1 on “Slave” NODO-MASTER) as follows:

S1-1: OFF
S1-2: OFF
S1-3: OFF
S1-4: ON

NB: under this mode, only synchronisations between “Master” NODO-MASTER and “Slave” NODO-MASTER are reproduced.

If ROLLING MODE is used to test the system before DALI or DMX installation, synchronisations between different “Master” NODO-MASTER or different standalone NODO-MASTER that are performed by means of DALI or DMX grouping will NOT be performed under ROLLING mode.

To set the **channels that will belong to the rolling set**, locate S4 dip-switches and set dip-switches 1-8 as in following Table 4. When dip-switch number “N” is set to ON, channel “N” will roll.

NB: Please note that if all dip-switches are set to OFF, a special function mode will be set, see chapter “SETTING NODO-MASTER TO PUSHDIM MODE”.

	DIP-switches S4							
	S4-8	**S4-7**	**S4-6**	**S4-5**	**S4-4**	**S4-3**	**S4-2**	**S4-1**
	Indirect Monochr.	Indirect Blue	Indirect Green	Indirect Red	Direct Monochr.	Direct Blue	Direct Green	Direct Red
Direct RGB	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
Direct Red	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
Direct Red-Blue	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
Direct RGB, Indirect Monochrome	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Direct Green-Blue, Indirect RGB	OFF	ON	ON	ON	OFF	ON	ON	ON

Table 4: *Examples of settings of dip-switches S4 in ROLLING mode to choose colours belonging to rolling set*

To set rolling speed, locate S4 dip-switches and set dip-switches 9-10 as in following Table 5.

Speed	DIP-switches S4	
	S4-10	**S4-9**
Very slow	OFF	OFF
Slow	OFF	ON
Medium	ON	OFF
Fast	ON	ON

Table 5: *Settings of dip-switches S4 in ROLLING mode to choose rolling speed*

To set SWITCH-ON mode (see also below 9.3), locate S5 dip-switch and set as per Table 6.

SWITCH-ON mode	DIP-switches S5	
	S5-1	**S5-2**
Safety: system remains switched-off after a loss and return of the electric net	OFF	OFF
Wall switch: system restore last stored scenery after a loss and return of the electric net	ON	OFF

Table 6: *Setting of dip-switches S5 in ROLLING mode to choose SWITCH-ON mode after a loss and return of electric net.*

NB: please note that the meaning of these modes is:
- **Safety: to let the system remain safely switched off after a loss and return of electric net**
- **Wall switch: to be able to switch on and off the system by means a wall-switch or timer-switch. Last stored scenery will be restored when wall switch or timer-switch is re-activated.**

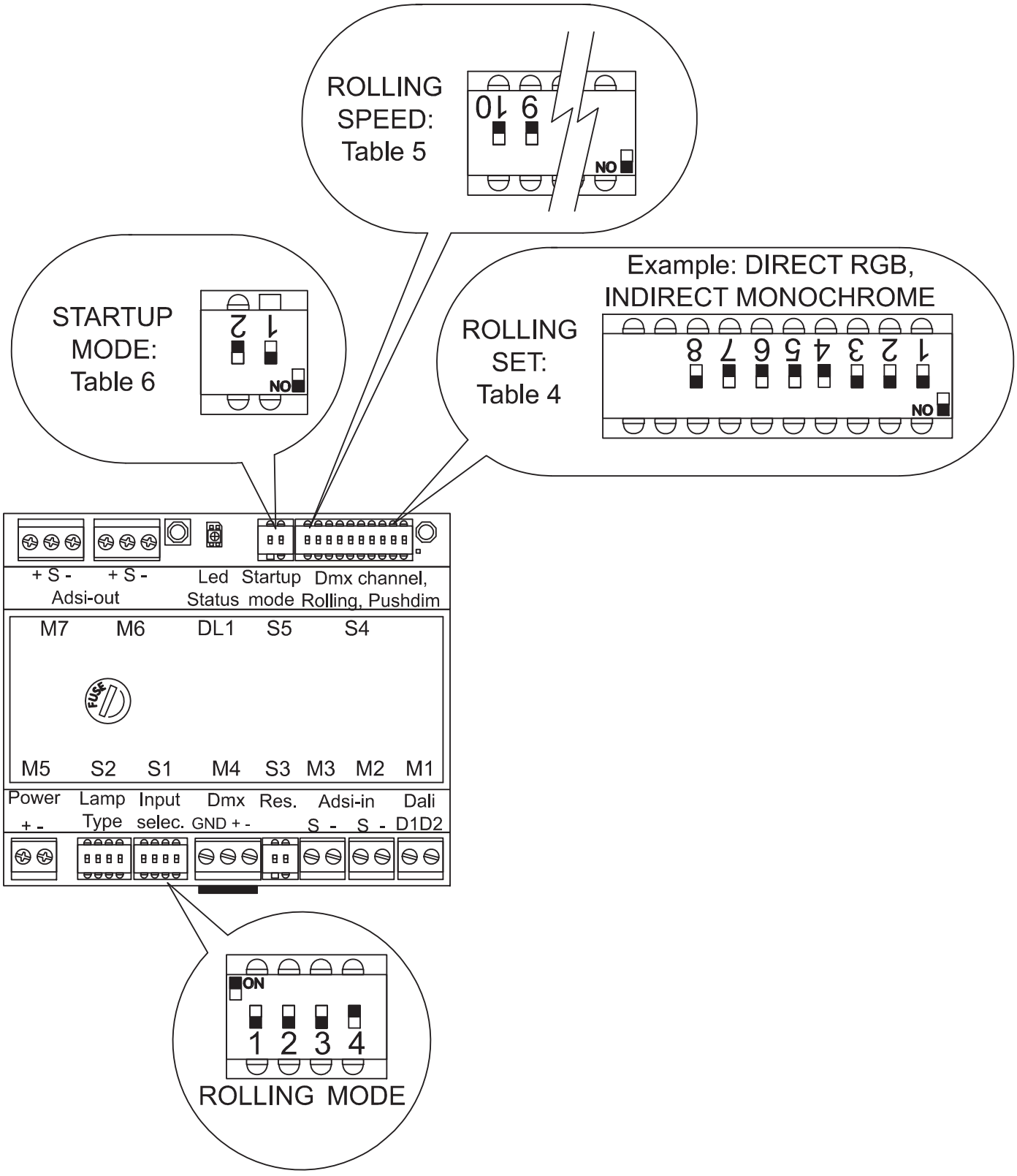


Fig. 9: *Settings of dip-switches in ROLLING mode*

9.3 - FUNCTION OF THE PUSH-BUTTON

The normally-open push-button optionally connected to M3-M5 terminal blocks can be used to:
- Switch on and off the system by means of a “long” push.
- Start and stop the rolling by means of a “short” push.
- Please note it is **NOT** possible to manually dim the system by means of the push.
- Should it be necessary to activate several NODO-MASTER with the same push-button, connect several NODO-MASTER under master-slave layout (see Fig. 3b and chapter 8). Connect the normally open push-button to «Master» NODO-MASTER.

Examples of use:
- **Start rolling mode every time at start-up:**
  - Set “wall-switch” on S5 dip-switch.
  - Manually activate rolling by means of long-push.
  - Then switch off the main by means of a wall-switch or of a timer-switch.
  - When the wall-switch or timer will be re-activated, the rolling will start again.

- **Activate same fixed scenery every time at start-up:**
  - Set “wall-switch” on S5 dip-switch.
  - Manually activate rolling by means of a long-push.
  - Wait for the system reaching desired scenery.
  - Stop the rolling by means of a brief push.
  - Switch off the main by means of a wall-switch or of a timer.
  - When the wall-switch or timer will be re-activated, the stored scenery will be restored again.

10 – SETTING NODO-MASTER TO “PUSHDIM” MODE

10.0 - INTRODUCTION

“PUSHDIM” mode can be used in simple installations to drive MONOCHROME modules without the needing to have an external DALI or DMX environment.
In this functioning mode, by means of a push-button it is possible:
- To switch on and off the system.
- To manually dim the monochrome modules.

Under this mode, NODO-MASTER self-generates a command sequence, necessary to switch-on, switch-off and dim monochrome fixtures.

PUSHDIM mode can be activated only on monochrome modules connected to channel 4 (direct monochrome) or 8 (indirect monochrome).

10.1 - CONNECTIONS

Use cables as shown in paragraph 5. Refer to fig. 3a and 3b.
Connect cables from push-button to M3-M5 terminal blocks.
NB: use a normally open push-button to short circuit “+” on M3 and M5 terminal blocks.
Connect feeding cables from power supply to M5 terminal block, respecting the polarity.
Connect the cable toward the fixtures to M6 terminal block, respecting the polarity.
In case of “Master-Slave” layout, connect “–“ and “S” on M7 of “Master” NODO-MASTER DMX to “–“ and “S” on M2 of “Slave” NODO-MASTER, respecting the polarity, fig. 3b.

10.2 - DIP-SWITCHES SETTINGS FOR PUSHDIM MODE

Please refer to fig. 10.

To set the PUSHDIM mode, locate S1 dip-switches, and set them on each stand alone NODO-MASTER or “Master” NODO-MASTER (do NOT set S1 on “Slave” NODO-MASTER) as follow:
S1-1: OFF
S1-2: OFF
S1-3: OFF
S1-4: ON.

NB: under this mode, only synchronisations between “Master” NODO-MASTER and “Slave” NODO-MASTER are reproduced.

Set S4 dip-switch to activate PUSHDIM mode, see Table 7.

	DIP-switches S4							
	S4-8	**S4-7**	**S4-6**	**S4-5**	**S4-4**	**S4-3**	**S4-2**	**S4-1**
	Indirect Monochr.	Indirect Blue	Indirect Green	Indirect Red	Direct Monochr.	Direct Blue	Direct Green	Direct Red
PUSHDIM	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

Table 7: *Settings of dip-switches S4 for activating PUSHDIM mode*

Dip-switches related to **rolling speed** (S4-9 and S4-10) are meaningless under this mode.

To set SWITCH-ON mode (see also below 10.3): locate S5 dip-switch and set as per Table 8.

SWITCH-ON mode	**DIP-switches S5**	
	S5-1	**S5-2**
Safety: system remains switched-off after a loss and return of the electric net	OFF	OFF
Wall switch: system restore last stored scenery after a loss and return of the electric net	ON	OFF

Table 8: *Settings of dip-switches S5 in PUSHDIM mode to choose SWITCH-ON mode after a loss and return of electric net.*

NB: please note that the meaning of these modes is:
- **Safety: to let the system remain safely switched off after a loss and return of electric net.**
- **Wall switch: to be able to switch on and off the system by means a wall-switch or timer-switch. Last stored scenery will be restored when wall switch or timer-switch is re-activated.**

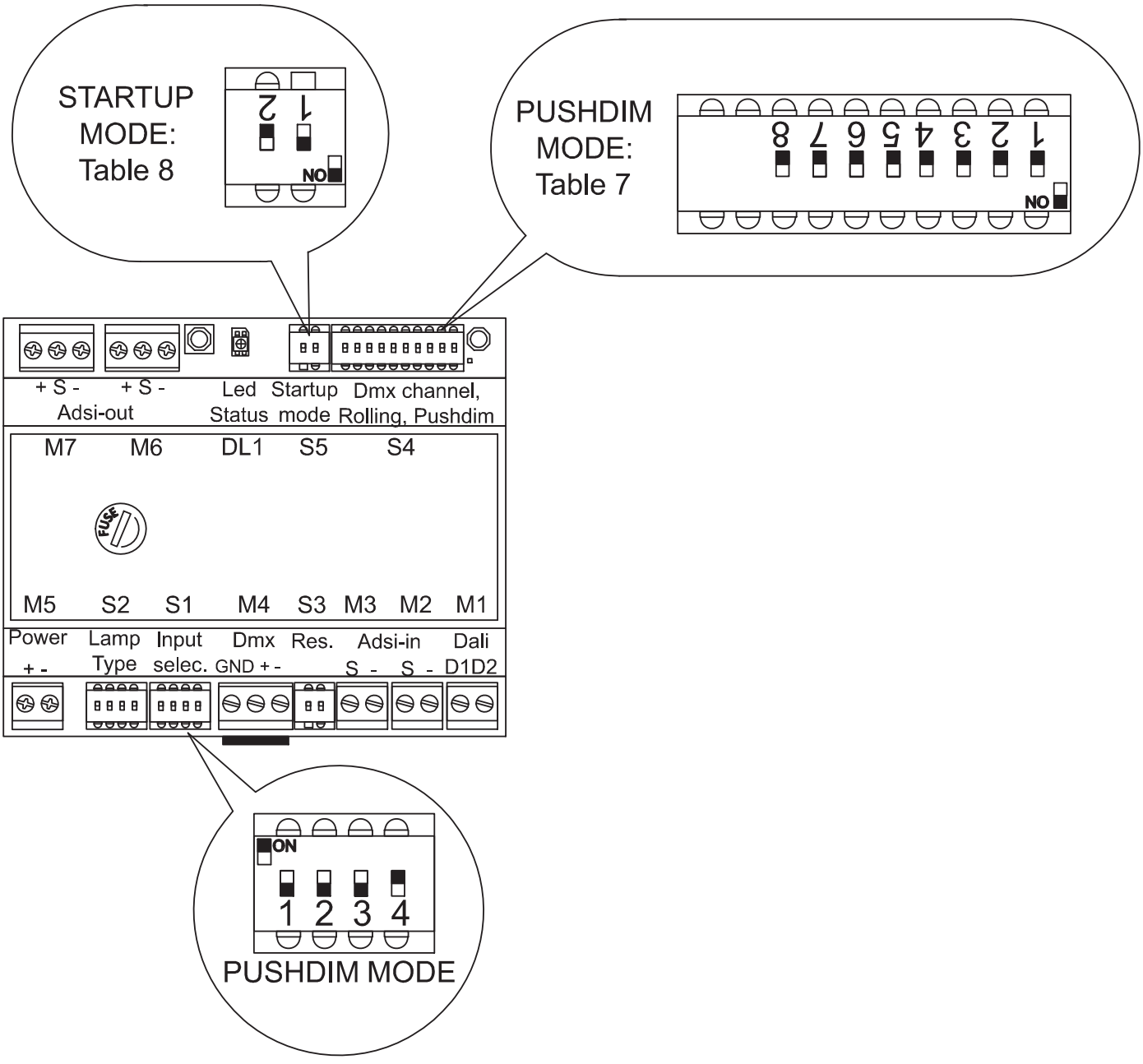


Fig. 10: *Settings of dip-switches for activating PUSHDIM mode*

10.3 - FUNCTION OF THE PUSH-BUTTON

The normally-open push-button optionally connected to M3-M5 terminal blocks can be used to:
- Switch-on and switch-off the system by means of a “short” push.
- Dim the system by means of a “long” push. Until the push is pressed, the system will dim.
- When the maximum or minimum level is reached, the dimming is stopped; it is necessary to release the push-button and press it again in order to invert the dimming slope and start dimming again.
- Every time the push-button is released and pressed again the dimming slope is inverted (i.e. if intensity was increasing before push-release, will decrease after next pressing).
- Should it be necessary to activate several NODO-MASTER with the same push-button, connect several NODO-MASTER under master-slave layout (see Fig. 3b and chapter 8). Connect the normally open push-button to «Master» NODO-MASTER.

Examples of use:
- **Activate same fixed intensity every time at start-up:**
  - Set “wall-switch” on S5 dip-switch.
  - Choose desired intensity by means of long push.
  - Switch off the main by means of a wall-switch or of a timer.
  - When the wall-switch or timer will be re-activated, the stored scenery will be restored again.

11 – TESTING THE SYSTEM, ERROR MESSAGES

Once the power supply is switched on, the following situations can happen:

a) Each section run well, respecting the synchronisations previewed by master-slave layout (if present), showing the colours in the correct order.

b) RGB fixtures (or some of them) remain steadily ON at maximum intensity (so showing white), MONOCHOME fixtures (or some of them) perform a cycle from minimum to maximum intensity, then remain steadily at maximum intensity: this situation means that “S” connection between NODO-MASTER and the section is not well done (interruption, false contacts…).

c) “Status Led” on NODO-MASTER is continuously on GREEN, but the section is OFF: this situation means that the connection “+” e “-“ between NODO-MASTER and the section is not well done (interruption, false contact, inverted polarity, burnt fuse...).

d) “Status Led” on NODO-MASTER is OFF, and the section is OFF: this situation means that the connection “+” e “-“ between the power supply and NODO-MASTER is not well done (interruption, false contact, inverted polarity). Verify if on M5 a 48VDC is present with correct polarity, if yes NODO-MASTER is fault and the fuse too.

e) “Status Led” on NODO-MASTER is ON, but not continuously GREEN, check the following situations:
   - Led is continuously on RED: NODO-MASTER is fault or short circuit on M6 (or M7) output.
   - Led is 1 sec. RED, 1 sec. GREEN: overload on M6 (or M7) (low voltage).
   - Led is 2 sec. RED, 2 sec. GREEN: overvoltage on M5.
   - Led is 5 sec. RED, 5 sec. GREEN: high temperature on NODO-MASTER.

INDICE

1 - INTRODUZIONE

La funzione del NODO-MASTER DALI o NODO-MASTER DALI/DMX è quella di connettere un ambiente DALI o DMX con apparecchi Artemide dotati di sorgenti led e controllo ADSI (Artemide digital signal interface).
E' inoltre possibile attivare una sequenza automatica di transizione tra scenari di colori (cosiddetto "ROLLING MODE"), ed utilizzare una interfaccia di comando mediante la pressione di un pulsante.

La caratteristica del bus ADSI, che utilizza 3 fili, è quella di separare il bus di potenza (alimentazione) da quello di comando (digitale). All'interno dei limiti di potenza dell'alimentatore, e con i vincoli dati della sezione dei cavi di alimentazione, è possibile gestire tratte di maggior lunghezza rispetto ad altri sistemi a 4 fili: il comando digitale e particolari configurazioni circuitali adottate permettono la costanza di intensità luminosa tra tutti gli apparecchi di una tratta. Ciò evita differenze di intensità tra l'ultimo apparecchio di una tratta ed il primo della tratta successiva.

Altra caratteristica interessante di tale bus è quello di poter condividere sulla stessa tratta apparecchi con tecnologia e/o funzione diversa: RBG diffondente diretta, monochrome diretta di potenza…

Nelle configurazioni complesse, sono disponibili fino ad 8 canali indipendenti su ogni tratta. Indipendentemente dai prodotti già presenti a catalogo, ecco alcuni esempi di apparecchi che possono coesistere su differenti tratte:
- Apparecchi a sospensione, emissione diretta a RGB diffondente (canali n. 1, 2, 3), indiretta bianco (canale n. 8),
- Apparecchi a plafone, emissione diretta RGB di potenza wall washer (canali n. 1, 2, 3), diretta bianco (canale n. 4),
- Apparecchi a pavimento, emissione led bianco diffondente (canale n. 4), emissione RGB diffondente (canali 1, 2, 3).

Ogni canale utilizzato sul bus ADSI corrisponde ad un indirizzo occupato sul bus DALI o DMX.

NB: quando NODO-MASTER DALI o NODO-MASTER DALI/DMX vengono utilizzati come interfacce DALI o DMX, non sono in grado di generare alcun comando ADSI. In altre parole qualsiasi comando del tipo "on", "off", "regolazione intensità", "richiamare scenario", … deve essere generato da un dispositivo DALI o DMX presente sul bus. E' quindi indispensabile che sul bus sia previsto un dispositivo capace di generare tali comandi, quali una consolle DMX o DALI.

Le interfacce NODO-MASTER DALI o NODO-MASTER DALI/DMX possono generare autonomamente comandi ADSI soltanto quando sono configurate per funzionare in modalità ROLLING o PUSHDIM, si vedano i paragrafi 9 e 10.

Di seguito si utilizzerà il termine "NODO-MASTER" indifferentemente per "NODO-MASTER DALI" e "NODO-MASTER DALI/DMX". In caso di funzioni presenti solo in uno dei due dispositivi, verrà specificato quale sia interessato:
- NODO-MASTER DALI: cioè NODO-MASTER DALI o NODO-MASTER DALI/DMX in modalità Dali
- NODO-MASTER DMX: cioè NODO-MASTER DALI/DMX in modalità DMX.

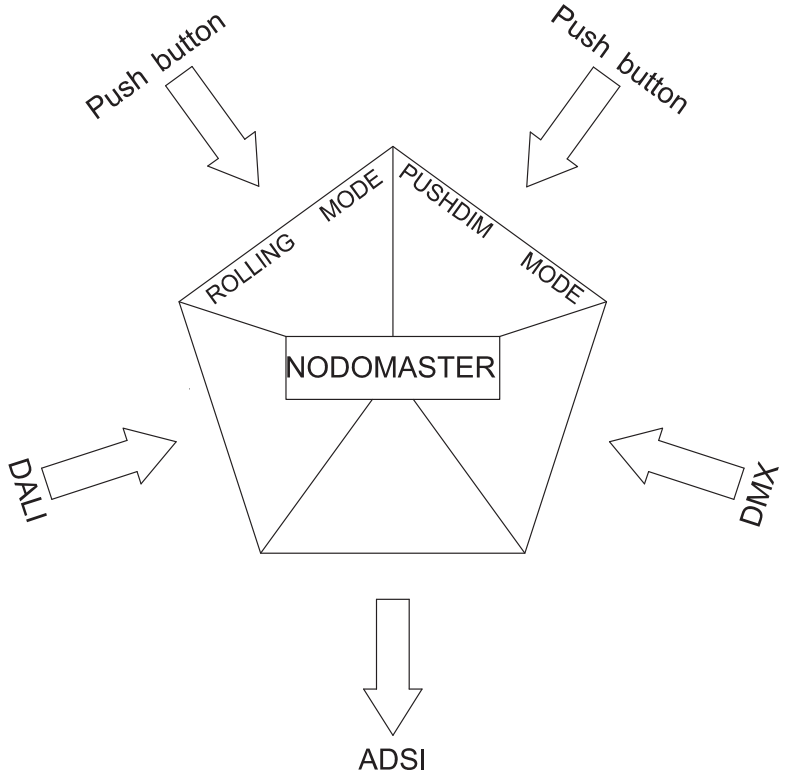


Fig. 1: *Interazioni del Nodo-Master*

2 - DISPOSIZIONE DEGLI APPARECCHI, LIMITI DA RISPETTARE

Si riportano di seguito alcune configurazioni tipiche utilizzabili per connettere apparecchi a tecnologia ADSI ad un NODO-MASTER.

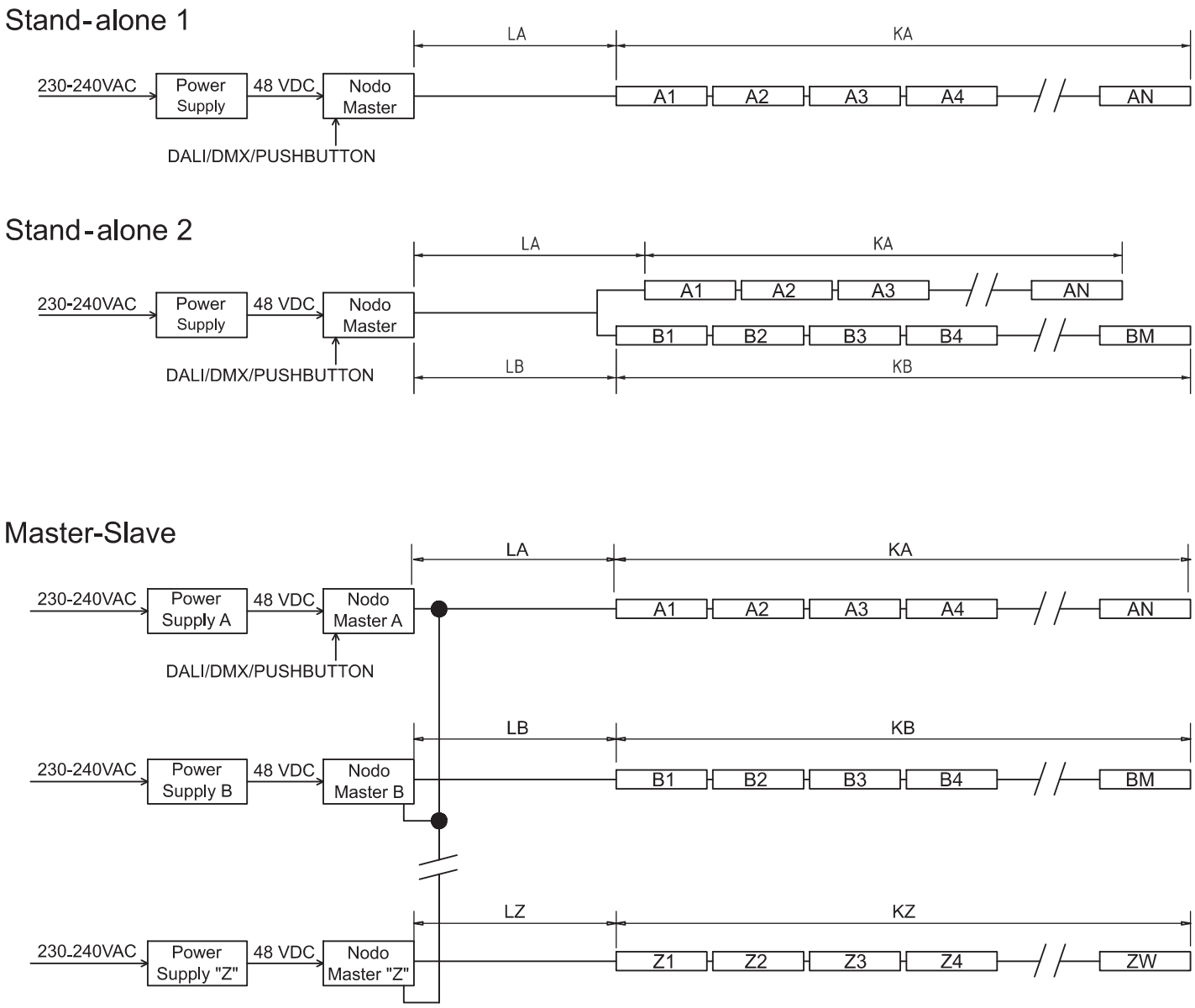


Fig. 2: *Configurazioni tipiche*

- Configurazione “Stand-alone 1”: alimentatore e NODO-MASTER: la più semplice delle configurazioni, l’alimentatore e NODO-MASTER alimentano una sola tratta di apparecchi.
- Configurazione “Stand-alone 2”: Alimentatore, NODO-MASTER, due tratte di apparecchi: utilizzabile in caso di alimentazione localizzata ad es. al centro di una tratta.
- Configurazione Master-Slave: Alimentatore 1, NODO-MASTER 1, tratta 1; Alimentatore 2, NODO-MASTER 2, tratta 2…: in caso di tratte particolarmente lunghe (superiori alla portata di un NODO-MASTER), permette di sincronizzare le varie sotto-tratte. NODO-MASTER 1 è il “master” (l’unico visibile dall’ambiente DALI/DMX, e che quindi occupa indirizzi sul bus), gli altri vengono configurati in modalità “slave” (non occupano indirizzi sul bus DALI/DMX).

- Potenza totale: in generale la potenza totale degli apparecchi presenti sulla tratta collegata ad un NODO-MASTER non deve superare il 90% della potenza dell’alimentatore che alimenta la tratta. Si veda la Tabella 1 per la scelta degli alimentatori consigliati.

- Massimo numero di apparecchi presenti sulla tratta collegata ad un NODO-MASTER: 25. In caso di configurazioni Master-Slave, nel numero di apparecchi connessi al NODO-MASTER della sezione Master devono anche essere conteggiati i NODO-MASTER presenti nelle sezioni Slave. Ad es. in caso di 3 NODO-MASTER Slave connessi ad un Master, il numero massimo di apparecchi installabili nella sezione Master è 25-3=22. Si veda anche la Tabella 1 per ulteriori limiti.

- Massima lunghezza di una tratta collegata ad un NODO-MASTER: considerando che gli apparecchi siano contigui, senza lasciare spazi vuoti tra loro, essendo L la lunghezza di cavo tra NODO-MASTER ed il primo apparecchio della tratta (nella configurazione Stand-alone 2, L=LA+LB) e K la lunghezza totale dei moduli (nel caso di configurazione Stand-alone 2, K=KA+K) si veda la Tabella 1 sotto riportata per valutare K.

- I limiti di lunghezza totale della tratta, del numero di apparecchi appartenenti alla stessa tratta e di potenza massima, sono legati alle caratteristiche elettriche degli apparecchi presenti sulla tratta ed alle sezioni dei conduttori utilizzati per i cablaggi passanti all'interno degli apparecchi. Per questi dati si veda anche quanto riportato sul catalogo Artemide nella sezione riguardante il prodotto.

Tipo di installazione	Tipologia modulo	Lunghezza modulo (m)	Sezione del cavo di alim. (mm^2)	L (lunghezza del cavo di alim.) (m)	K max (lunghezza totale dei moduli) (m)	N. max di moduli	Potenza alimentatore (W)
Pavimento	RGB	0.6	0.75	5	**12**	20	240
				10	**8.4**	14	
				15	**6.6**	11	
		0.9	0.75	5	**10.8**	12	240
				10	**9**	10	
				15	**7.2**	8	
			1.5	15	**10.8**	12	
			2.5	15	**12.6**	14	320
		1.2	1.5	5	**14.4**	12	320
				10	**12**	10	
				15	**10.8**	9	
			2.5	5	**14.4**	12	320
				10	**13.2**	11	
				15	**12**	10	
	Bianco	0.6	0.75	15	**12**	20	100
		0.9	0.75	15	**9.9**	11	100
				5	**18**	20	240
				10	**16.2**	18	
				15	**13.5**	15	
		1.2	0.75	5	**20.4**	17	240
				10	**16.8**	14	
				15	**13.2**	11	
			1.5	15	**18**	15	
Sospensione Soffitto Incasso	RGB	1.2	2.5	10	**15.6**	13	320
				15	**14.4**	12	
		2.4	2.5	10	**14.4**	6	320
				15	**12**	5	
	Bianco	1.2	2.5	20	**9.6**	8	320
				30	**7.2**	6	240
		2.4	2.5	20	**9.6**	4	320

Tabella 1: *Limiti delle configurazioni*

- Di seguito in Fig. 3a e 3b i collegamenti da eseguire sul NODO-MASTER per ciascuna delle configurazioni sopra riportate.

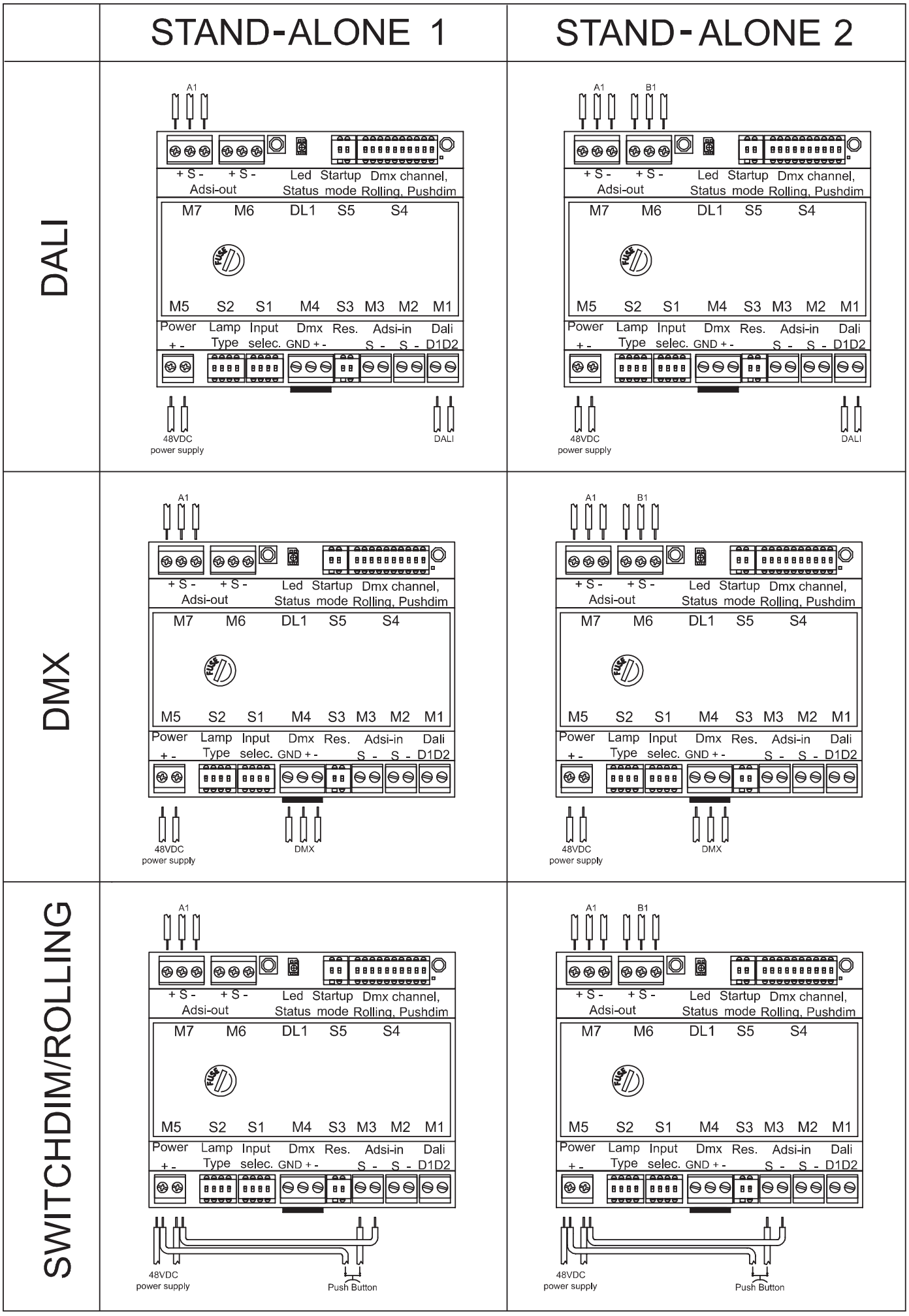


Fig. 3a: *Collegamenti da realizzare su NODO-MASTER per configurazioni "Stand-alone 1" e "Stand-alone 2" (si vedano anche i paragrafi 6.2, 7.2, 8.2, 9.2 e 10.2 per la disposizione dei dip-switches)*

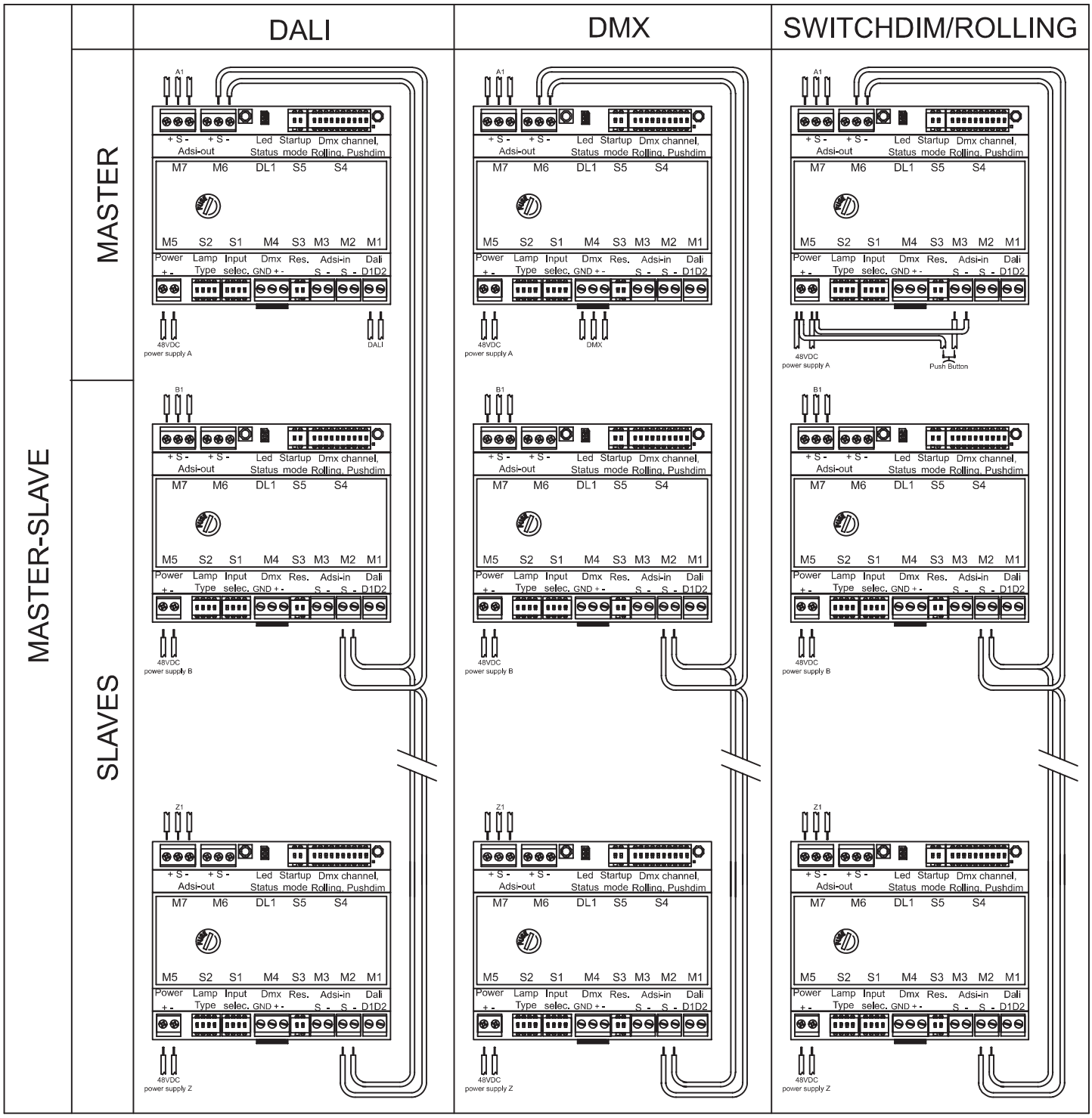


Fig. 3b: *Collegamenti da realizzare su NODO-MASTER Master per configurazioni "Master-Slave" (si vedano anche i paragrafi 6.2, 7.2, 8.2, 9.2 e 10.2 per la disposizione dei dip-switches)*

3 - FUSIBILE

Un fusibile ritardato da 10A (T10) Ø5 x 20 mm è presente sul pannello frontale del NODO-MASTER, a protezione della linea di alimentazione degli apparecchi.

4 - ALIMENTAZIONE

Utilizzare alimentatori a tensione costante consigliati da Artemide sul proprio catalogo, rispettando i vincoli ambientali e di sezione dei cavi (V_{OUT} = 48VDC, max 480W).

NB: Si declina qualsiasi responsabilità nel caso vengano utilizzati alimentatori non specificati da Artemide.

5 - CARATTERISTICHE DEI CAVI

Fare riferimento alla Fig. 4.

Dall'alimentatore fino al NODO-MASTER (morsetto M5): utilizzare cavi compatibili con le condizioni ambientali presenti. Tenere la lunghezza di questo collegamento la più corta possibile, utilizzare come minimo 2 x 2.5 mm². Nel caso fossero presenti, utilizzare i cavi già collegati all'alimentatore.

Dal NODO-MASTER (morsetti M6 and M7) fino al 1° apparecchio della tratta: se esiste, scegliere il codice previsto a catalogo per questo scopo (ad es. per Algoritmo incasso suolo 3 x 0.75 mm²).
Altrimenti utilizzare un cavo a 3 conduttori, compatibile con l'ambiente nel quale verrà posto. Questa connessione deve essere tenuta la più corta possibile, si consiglia una sezione minima di 3x1.5 mm² (meglio se 3x2.5 mm²). Rispettare la polarità "+", "-", "S" indicate sui cavi e sui morsetti.

Dal bus DALI al NODO-MASTER (morsetto M1): calcolare la massima distanza tra l'unità di controllo Dali (ad es. Touch Panel, Group Controller, Scene Controller, …) ed il più lontano dispositivo di attuazione, incluso NODO-MASTER: utilizzare cavi di sezione superiori a 0.5 mm² per distanze fino a 100 m, superiori a 0.75 mm² per distanze fino a 150m, superiore a 1.5 mm² per distanze maggiori. La massima distanza non deve superare i 300 m. Il bus DALI non è polarizzato.

Dal bus DMX fino al NODO-MASTER (morsetto M4, solo per NODO-MASTER DMX): utilizzare cavi con coppie attorcigliate, ad es. cavi CAT5. Eseguire le connessioni come mostrato in uno dei due schemi di Fig. 5. Rispettare la polarità "GND", "+", "-".

Connessioni per configurazioni "Master-Slave" tra i morsetti M2 and M6: utilizzare cavi con sezione minima di 2 x 0.5 mm², connettere i poli "–" e "S" dei morsetti M6 ed M7 del NODO-MASTER scelto come "Master" agli omologhi poli dei morsetti M2 o M3 sui NODO-MASTER scelti come "Slave", rispettando la polarità.

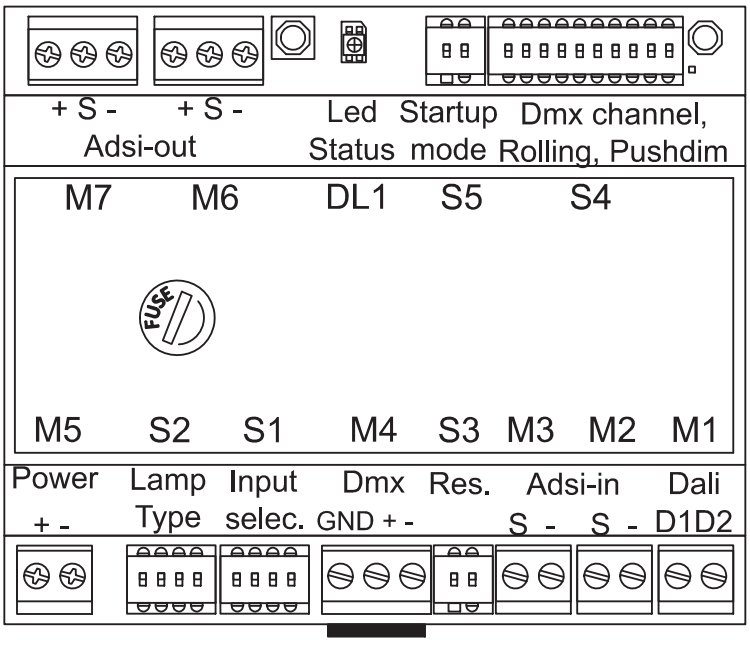


Fig. 4: *Disposizione dei morsetti su Nodo-Master*
(si vedano anche i paragrafi 6.2, 7.2, 8.2, 9.2 e 10.2 per la disposizione dei dip-switches)

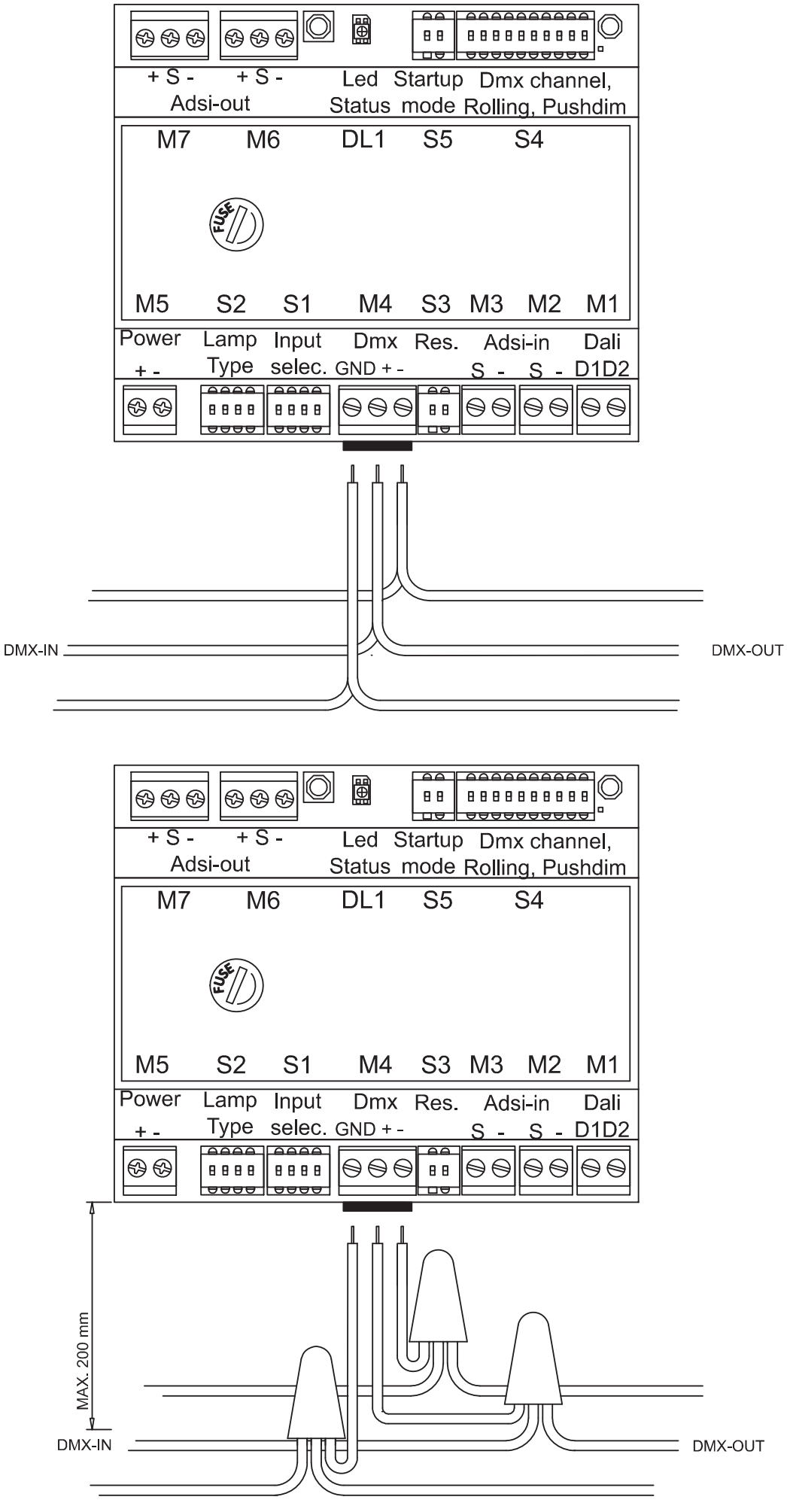


Fig. 5: *Connessioni al bus DMX*

6 - IMPOSTARE NODO-MASTER IN MODALITÀ 'DALI'

6-1 - COLLEGAMENTI

Usare cavi secondo quanto indicato nel paragrafo 5. Fare riferimento alle Figg. 3a e 3b.
Collegare i cavi dal bus DALI al morsetto M1.
Collegare i cavi di alimentazione dall'alimentatore al morsetto M5, rispettando la polarità.
Collegare il cavo verso gli apparecchi di illuminazione al morsetto M6, rispettando la polarità.
In caso di configurazioni "Master-Slave", collegare "–" e "S" di M7 del NODO-MASTER DALI "Master" al "–" e "S" di M2 dello NODO-MASTER "Slave", rispettando la polarità, vedi Fig. 3b.

6.2 - IMPOSTAZIONE DEI DIP-SWITCHES PER LA MODALITÀ 'DALI'

Fare riferimento alla Fig. 6.

Per impostare il tipo di bus, individuare i dip-switches S1. Per impostare il bus DALI:
S1-1: OFF
S1-2: ON
S1-3: OFF
S1-4: OFF

Per impostare il numero di indirizzi che saranno riservati sul bus DALI, individuare i dip-switches S2:
- Se sulla tratta connessa al NODO-MASTER che si sta impostando sono presenti solo apparecchi ad emissione DIRETTA di tipo RGB, NODO-MASTER DALI occuperà 3 indirizzi sul bus. Impostare i dip-switches S2 come segue:
  S2-1: ON
  S2-2: OFF
  S2-3: OFF
  S2-4: OFF

- Se sulla tratta connessa al NODO-MASTER che si sta impostando sono presenti solo apparecchi ad emissione DIRETTA di tipo MONOCHROME (emissione solo bianca, solo rossa, solo verde, solo blu solo ambra), NODO MASTER DALI occuperà 1 indirizzo sul bus. Impostare i dip-switches S2 come segue:
  S2-1: OFF
  S2-2: ON
  S2-3: OFF
  S2-4: OFF

- Se sulla tratta connessa al NODO-MASTER che si sta impostando sono presenti apparecchi ad emissione RGB e/o MONOCHROME e/o di differente tipologia (emissione DIRETTA o INDIRETTA), NODO MASTER DALI occuperà N indirizzi sul bus, come risulta dalla seguente Tabella 2. Impostare i dip-switches S2 come segue (considerare che ON = apparecchio presente, OFF = apparecchio NON presente):

Totale indirizzi occupati	S2-1 (RGB DIRETTO)	S2-2 (MONCROMO DIRETTO)	S2-3 (RGB INDIRETTO)	S2-4 (MONOCROMO INDIRETTO)
1	OFF	ON	OFF	OFF
1	OFF	OFF	OFF	ON
2	OFF	ON	OFF	ON
3	ON	OFF	OFF	OFF
3	OFF	OFF	ON	OFF
4	ON	ON	OFF	OFF
4	OFF	OFF	ON	ON
4	ON	OFF	OFF	ON
4	OFF	ON	ON	OFF
6	ON	OFF	ON	OFF
7	ON	ON	ON	OFF
7	ON	OFF	ON	ON
8	ON	ON	ON	ON

Tabella 2: *Impostazioni dei dip-switches S2*

NB: a causa del limitato numero di indirizzi (64) gestito dal protocollo DALI, è consigliato di impostare sempre il minimo numero di indirizzi, compatibilmente con le caratteristiche dell'installazione.

Nella modalità NODO-MASTER DALI, S3 e S4 non sono utilizzati.

6.3 - GESTIONE DEGLI INDIRIZZI IN CASO DI IMPIANTI COMPLESSI

Si supponga di avere due tratte, ognuna connessa ad un NODO-MASTER DALI, e che sia necessario sincronizzare i colori di entrambe le tratte. Se le due tratte sono lontane tra loro, sarà difficile utilizzare una configurazione “master-slave”; tramite dei “group controllers”, sarà quindi necessario raggruppare in “gruppi” (max 16) gli indirizzi DALI, come previsto dallo standard DALI.

Con la premessa che il numero dell’indirizzo può essere visualizzato solo utilizzando una interfaccia DALI-PC o mediante alcuni DALI Control Panel dotati di display, nel semplice caso di soli apparecchi RGB, ad esempio si potrebbe avere:

NODO-MASTER DALI N. 1:
R = indirizzo n. 1
G = indirizzo n. 2
B = indirizzo n. 3

NODO-MASTER DALI N. 2:
R = indirizzo n. 4
G = indirizzo n. 5
B = indirizzo n. 6

Seguendo le istruzioni fornite con il Group Controller (o Control Panel), aggiungere ogni indirizzo al relativo gruppo DALI:
Gruppo 1 (RED): indirizzo n. 1, indirizzo n. 4
Gruppo 2 (GREEN): indirizzo n. 2, indirizzo n. 5
Gruppo 3 (BLUE): indirizzo n. 3, indirizzo n. 6

I 3 gruppi saranno quindi gestiti mediante “scene” (max 16), come previsto dallo standard DALI, utilizzando “sceneries controllers“. Infine, più “scene” possono essere inserite in “sequenze”, se previsto dal DALI Control Panel eventualmente utilizzato.

A causa del fatto che il protocollo DALI assegna gli indirizzi in modo casuale ai dispositive rilevati sul bus (includendo con ciò i NODO-MASTER), potrebbe accadere che gli indirizzi assegnati ad un NODO-MASTER non siano contigui e/o nell’ordine desiderato.

In tal caso, riprendendo il caso precedente, si potrebbe avere:

NODO-MASTER DALI N. 1:
R = indirizzo n. 6
G = indirizzo n. 2
B = indirizzo n. 3

NODO-MASTER DALI N. 2:
R = indirizzo n. 1
G = indirizzo n. 4
B = indirizzo n. 5

In tal caso, aggiungere gli indirizzi DALI ai gruppi DALI nel seguente modo:
Gruppo 1 (RED): indirizzo n. 6, indirizzo n. 1
Gruppo 2 (GREEN): indirizzo n. 2, indirizzo n. 4
Gruppo 3 (BLUE): indirizzo n. 3, indirizzo n. 5

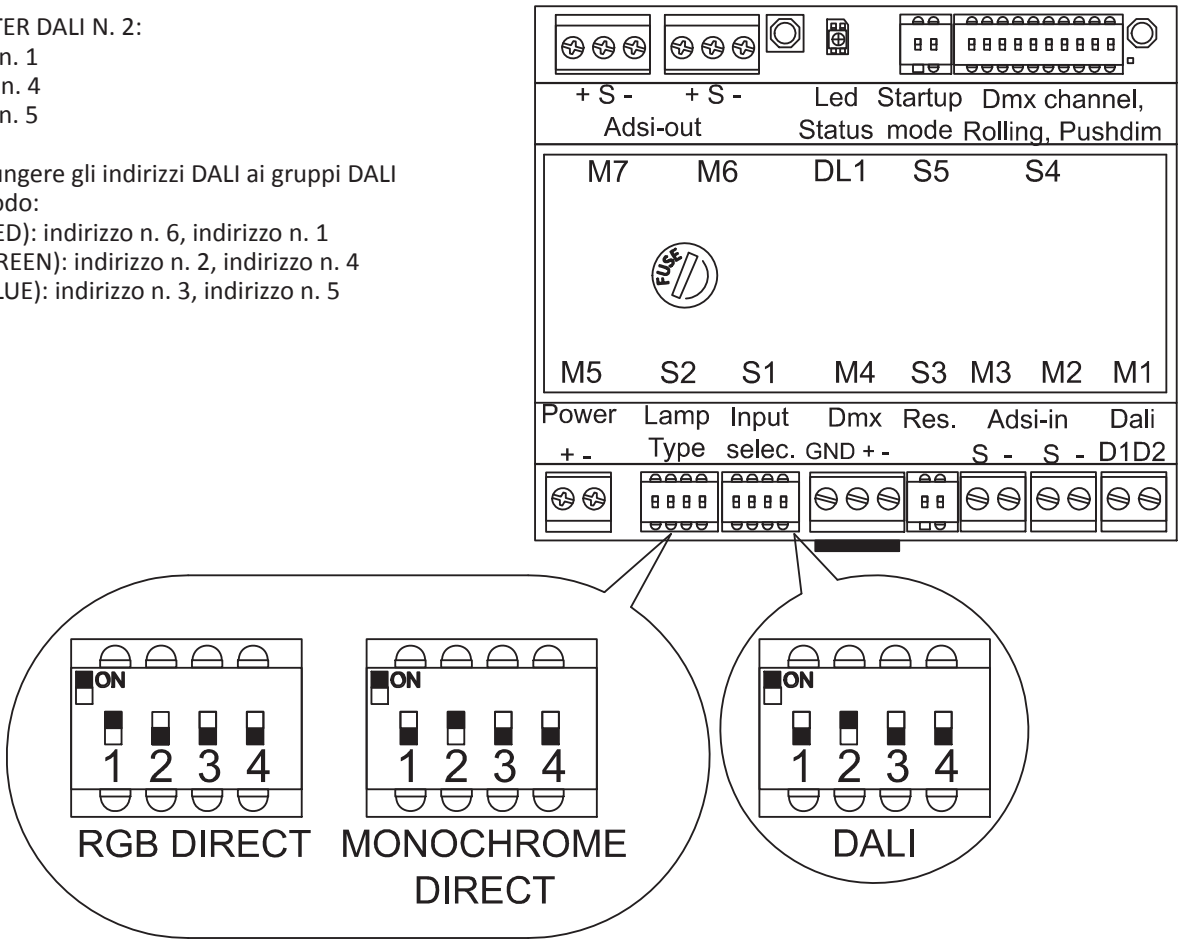


Fig. 6: *Impostazione dei dip-switches S2 in modalità “Dali”*
Si veda anche la Tabella 2 per altre combinazioni di apparecchi

7 - IMPOSTARE NODO-MASTER IN MODALITÀ ‘DMX’

7.1 - COLLEGAMENTI

Usare cavi secondo quanto indicato nel paragrafo 5. Fare riferimento alle Figg. 3a e 3b.
Collegare i cavi dal bus DMX al morsetto M4, rispettando la polarità. Utilizzare uno dei due schemi mostrati in fig. 5.
Collegare i cavi di alimentazione dall’alimentatore al morsetto M5, rispettando la polarità.
Collegare il cavo verso gli apparecchi di illuminazione al morsetto M6, rispettando la polarità.
In caso di configurazioni “Master-Slave”, collegare “–“ e “S” di M7 del NODO-MASTER DALI “Master” al “–“ e “S” di M2 dello NODO-MASTER “Slave”, rispettando la polarità, vedi Fig. 3b.

7.2 - IMPOSTAZIONE DEI DIP-SWITCHES PER LA MODALITÀ ‘DMX’

Fare riferimento alla Fig. 7.

Per impostare il tipo di bus, individuare i dip-switches S1. Per impostare il bus DMX:
S1-1: ON
S1-2: OFF
S1-3: OFF
S1-4: OFF

Per impostare il numero di indirizzi che saranno riservati sul bus DMX, individuare i dip-switches S2:
- Se sulla tratta connessa al NODO-MASTER che si sta impostando sono presenti solo apparecchi ad emissione DIRETTA di tipo RGB, NODO-MASTER DMX occuperà 3 indirizzi sul bus. Impostare i dip-switches S2 come segue:
  S2-1: ON
  S2-2: OFF
  S2-3: OFF
  S2-4: OFF

- Se sulla tratta connessa al NODO-MASTER che si sta impostando sono presenti solo apparecchi ad emissione DIRETTA di tipo MONOCHROME (emissione solo bianca, solo rossa, solo verde, solo blu solo ambra), NODO MASTER DMX occuperà 1 indirizzo sul bus. Impostare i dip-switches S2 come segue:
  2-1: OFF
  S2-2: ON
  S2-3: OFF
  S2-4: OFF

- Se sulla tratta connessa al NODO-MASTER che si sta impostando sono presenti apparecchi ad emissione RGB e/o MONOCHROME e/o di differente tipologia (emissione DIRETTA o INDIRETTA), NODO MASTER DMX occuperà N indirizzi sul bus, fare riferimento alla Tabella 2 per impostare i dip-switches S2 (considerare che ON = apparecchio presente, OFF = apparecchio NON presente):

Per abilitare la resistenza di terminazione interna, individuare il dip-switches S3.
Come previsto dallo standard DMX, l’ultimo dispositivo connesso ad un bus DMX deve avere una resistenza del valore di 120 Ω connessa tra il “+” ed il “–“ del bus. Questa resistenza è presente all’interno di NODO-MASTER DMX e può essere abilitata impostando S3-1 a ON.

Per impostare gli indirizzi DMX, individuare i dip-switches S4.
Su di un bus DMX, ogni dispositivo deve avere un indirizzo unico, compreso tra 1 e 511.
In funzione del numero di indirizzi occupati da ognuno dei NODO-MASTER DMX (si veda la Tabella n. 2 e l’impostazione dei dip-switches S2), scegliere un indirizzo libero per ogni NODO-MASTER DMX, ed assegnarlo utilizzando i dip-switches S4.
I dip-switches da S4-1 a S4-9 sono usati per selezionare il primo indirizzo occupato da NODO-MASTER DMX. Si veda la seguente Tabella n. 3, che utilizza una codifica binaria, dove 0 = OFF, 1 = ON.

Indirizzo DMX	N. DIP-switch									
	10	9	8	7	6	5	4	3	2	1
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
2	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
3	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
4	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
5	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
6	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF
7	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
8	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
9	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
10	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF
11	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
12	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
13	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
14	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
15	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON
16	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
17	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
18	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF
19	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
20	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
21	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
22	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
23	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON
24	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
25	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
26	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF
27	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON
28	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
29	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON
30	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF
31	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON
32	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
33	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
34	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
35	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
36	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
37	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
38	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
39	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON
40	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
41	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
42	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF
43	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON
44	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
45	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON
46	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF
47	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON
48	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
49	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
50	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF
51	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON
52	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
53	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON
54	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF
55	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON
56	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
57	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON
58	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF
59	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON
60	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF
61	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON
62	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF
63	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON

Indirizzo DMX	N. DIP-switch									
	10	9	8	7	6	5	4	3	2	1
64	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
65	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
66	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF
67	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON
68	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
69	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
70	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF
71	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON
72	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
73	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON
74	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF
75	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON
76	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
77	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON
78	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF
79	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON
80	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
81	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON
82	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF
83	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON
84	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
85	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON
86	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF
87	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON
88	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
89	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON
90	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF
91	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON
92	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF
93	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON
94	OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF
95	OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON	ON
96	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
97	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON
98	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF
99	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON
100	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
101	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON
102	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF
103	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON
104	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
105	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON
106	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF
107	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON
108	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF
109	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON
110	OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF
111	OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON	ON
112	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
113	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON
114	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF
115	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON
116	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF
117	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON
118	OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF
119	OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON	ON
120	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF
121	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON
122	OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF
123	OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON	ON
124	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF
125	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF	ON
126	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF
127	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON

Tabella 3-1: *Impostazione degli indirizzi DMX*

Indirizzo DMX	N. DIP-switch									
	10	9	8	7	6	5	4	3	2	1
128	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
129	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
130	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF
131	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON
132	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
133	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON
134	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF
135	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON
136	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
137	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON
138	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF
139	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON
140	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
141	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON
142	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF
143	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON
144	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
145	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON
146	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF
147	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON
148	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
149	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON
150	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF
151	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON
152	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
153	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON
154	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF
155	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON
156	OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF
157	OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON
158	OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF
159	OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON	ON
160	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
161	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON
162	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF
163	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON
164	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
165	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON
166	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF
167	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON
168	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
169	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON
170	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF
171	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON
172	OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF
173	OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON
174	OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF
175	OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON	ON
176	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
177	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON
178	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF
179	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON
180	OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF
181	OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON
182	OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF
183	OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON	ON
184	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF
185	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON
186	OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF
187	OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON	ON
188	OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF
189	OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF	ON
190	OFF	OFF	ON	OFF	ON	ON	ON	ON	ON	OFF
191	OFF	OFF	ON	OFF	ON	ON	ON	ON	ON	ON

Indirizzo DMX	N. DIP-switch									
	10	9	8	7	6	5	4	3	2	1
192	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
193	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
194	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF
195	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON
196	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
197	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON
198	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF
199	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON
200	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
201	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON
202	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF
203	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON
204	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF
205	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON
206	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF
207	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON	ON
208	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
209	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON
210	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF
211	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON
212	OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF
213	OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON
214	OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF
215	OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON	ON
216	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF
217	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON
218	OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF
219	OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON	ON
220	OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF
221	OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF	ON
222	OFF	OFF	ON	ON	OFF	ON	ON	ON	ON	OFF
223	OFF	OFF	ON	ON	OFF	ON	ON	ON	ON	ON
224	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
225	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON
226	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF
227	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON
228	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF
229	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON
230	OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF
231	OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON	ON
232	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF
233	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON
234	OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF
235	OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON	ON
236	OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF
237	OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF	ON
238	OFF	OFF	ON	ON	ON	OFF	ON	ON	ON	OFF
239	OFF	OFF	ON	ON	ON	OFF	ON	ON	ON	ON
240	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF
241	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON
242	OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF
243	OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON	ON
244	OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF
245	OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF	ON
246	OFF	OFF	ON	ON	ON	ON	OFF	ON	ON	OFF
247	OFF	OFF	ON	ON	ON	ON	OFF	ON	ON	ON
248	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF
249	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF	ON
250	OFF	OFF	ON	ON	ON	ON	ON	OFF	ON	OFF
251	OFF	OFF	ON	ON	ON	ON	ON	OFF	ON	ON
252	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF
253	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF	ON
254	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	OFF
255	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	ON

Tabella 3-2: *Impostazione degli indirizzi DMX*

Indirizzo DMX	N. DIP-switch									
	10	9	8	7	6	5	4	3	2	1
256	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
257	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
258	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
259	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
260	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
261	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
262	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF
263	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
264	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
265	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
266	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF
267	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
268	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
269	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
270	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
271	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON
272	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
273	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
274	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF
275	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
276	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
277	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
278	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
279	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON	ON
280	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
281	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
282	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON	OFF
283	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON	ON
284	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
285	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF	ON
286	OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON	OFF
287	OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON	ON
288	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
289	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
290	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
291	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
292	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
293	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
294	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
295	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON	ON
296	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
297	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
298	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON	OFF
299	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON	ON
300	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
301	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF	ON
302	OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON	OFF
303	OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON	ON
304	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
305	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
306	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON	OFF
307	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON
308	OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
309	OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF	ON
310	OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON	OFF
311	OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON	ON
312	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
313	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF	ON
314	OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON	OFF
315	OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON	ON
316	OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF	OFF
317	OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF	ON
318	OFF	ON	OFF	OFF	ON	ON	ON	ON	ON	OFF
319	OFF	ON	OFF	OFF	ON	ON	ON	ON	ON	ON

Indirizzo DMX	N. DIP-switch									
	10	9	8	7	6	5	4	3	2	1
320	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
321	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
322	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF
323	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	ON
324	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
325	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
326	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON	OFF
327	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON	ON
328	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
329	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	ON
330	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON	OFF
331	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON	ON
332	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
333	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF	ON
334	OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON	OFF
335	OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON	ON
336	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
337	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	ON
338	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON	OFF
339	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON	ON
340	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
341	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON
342	OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON	OFF
343	OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON	ON
344	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
345	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF	ON
346	OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON	OFF
347	OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON	ON
348	OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF	OFF
349	OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF	ON
350	OFF	ON	OFF	ON	OFF	ON	ON	ON	ON	OFF
351	OFF	ON	OFF	ON	OFF	ON	ON	ON	ON	ON
352	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
353	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	ON
354	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON	OFF
355	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON	ON
356	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
357	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	ON
358	OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON	OFF
359	OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON	ON
360	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
361	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF	ON
362	OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON	OFF
363	OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON	ON
364	OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF	OFF
365	OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF	ON
366	OFF	ON	OFF	ON	ON	OFF	ON	ON	ON	OFF
367	OFF	ON	OFF	ON	ON	OFF	ON	ON	ON	ON
368	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
369	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF	ON
370	OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON	OFF
371	OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON	ON
372	OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF	OFF
373	OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF	ON
374	OFF	ON	OFF	ON	ON	ON	OFF	ON	ON	OFF
375	OFF	ON	OFF	ON	ON	ON	OFF	ON	ON	ON
376	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF	OFF
377	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF	ON
378	OFF	ON	OFF	ON	ON	ON	ON	OFF	ON	OFF
379	OFF	ON	OFF	ON	ON	ON	ON	OFF	ON	ON
380	OFF	ON	OFF	ON	ON	ON	ON	ON	OFF	OFF
381	OFF	ON	OFF	ON	ON	ON	ON	ON	OFF	ON
382	OFF	ON	OFF	ON	ON	ON	ON	ON	ON	OFF
383	OFF	ON	OFF	ON	ON	ON	ON	ON	ON	ON

Tabella 3-3: *Impostazione degli indirizzi DMX*

Indirizzo DMX	N. DIP-switch									
	10	9	8	7	6	5	4	3	2	1
384	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
385	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
386	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF
387	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	ON
388	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
389	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	ON
390	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON	OFF
391	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON
392	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
393	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	ON
394	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON	OFF
395	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON	ON
396	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
397	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	ON
398	OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON	OFF
399	OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON	ON
400	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
401	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	ON
402	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON	OFF
403	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON	ON
404	OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
405	OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF	ON
406	OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON	OFF
407	OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON	ON
408	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
409	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON
410	OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON	OFF
411	OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON	ON
412	OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF	OFF
413	OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF	ON
414	OFF	ON	ON	OFF	OFF	ON	ON	ON	ON	OFF
415	OFF	ON	ON	OFF	OFF	ON	ON	ON	ON	ON
416	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
417	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	ON
418	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON	OFF
419	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON	ON
420	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
421	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF	ON
422	OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON	OFF
423	OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON	ON
424	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
425	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF	ON
426	OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON	OFF
427	OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON	ON
428	OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF	OFF
429	OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF	ON
430	OFF	ON	ON	OFF	ON	OFF	ON	ON	ON	OFF
431	OFF	ON	ON	OFF	ON	OFF	ON	ON	ON	ON
432	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
433	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF	ON
434	OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON	OFF
435	OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON	ON
436	OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF	OFF
437	OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF	ON
438	OFF	ON	ON	OFF	ON	ON	OFF	ON	ON	OFF
439	OFF	ON	ON	OFF	ON	ON	OFF	ON	ON	ON
440	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF	OFF
441	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF	ON
442	OFF	ON	ON	OFF	ON	ON	ON	OFF	ON	OFF
443	OFF	ON	ON	OFF	ON	ON	ON	OFF	ON	ON
444	OFF	ON	ON	OFF	ON	ON	ON	ON	OFF	OFF
445	OFF	ON	ON	OFF	ON	ON	ON	ON	OFF	ON
446	OFF	ON	ON	OFF	ON	ON	ON	ON	ON	OFF
447	OFF	ON	ON	OFF	ON	ON	ON	ON	ON	ON

Indirizzo DMX	N. DIP-switch									
	10	9	8	7	6	5	4	3	2	1
448	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
449	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
450	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON	OFF
451	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON
452	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
453	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF	ON
454	OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON	OFF
455	OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON	ON
456	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
457	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF	ON
458	OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON	OFF
459	OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON	ON
460	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF
461	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF	ON
462	OFF	ON	ON	ON	OFF	OFF	ON	ON	ON	OFF
463	OFF	ON	ON	ON	OFF	OFF	ON	ON	ON	ON
464	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
465	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF	ON
466	OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON	OFF
467	OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON	ON
468	OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF	OFF
469	OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF	ON
470	OFF	ON	ON	ON	OFF	ON	OFF	ON	ON	OFF
471	OFF	ON	ON	ON	OFF	ON	OFF	ON	ON	ON
472	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF	OFF
473	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF	ON
474	OFF	ON	ON	ON	OFF	ON	ON	OFF	ON	OFF
475	OFF	ON	ON	ON	OFF	ON	ON	OFF	ON	ON
476	OFF	ON	ON	ON	OFF	ON	ON	ON	OFF	OFF
477	OFF	ON	ON	ON	OFF	ON	ON	ON	OFF	ON
478	OFF	ON	ON	ON	OFF	ON	ON	ON	ON	OFF
479	OFF	ON	ON	ON	OFF	ON	ON	ON	ON	ON
480	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
481	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON
482	OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON	OFF
483	OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON	ON
484	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF	OFF
485	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF	ON
486	OFF	ON	ON	ON	ON	OFF	OFF	ON	ON	OFF
487	OFF	ON	ON	ON	ON	OFF	OFF	ON	ON	ON
488	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF	OFF
489	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF	ON
490	OFF	ON	ON	ON	ON	OFF	ON	OFF	ON	OFF
491	OFF	ON	ON	ON	ON	OFF	ON	OFF	ON	ON
492	OFF	ON	ON	ON	ON	OFF	ON	ON	OFF	OFF
493	OFF	ON	ON	ON	ON	OFF	ON	ON	OFF	ON
494	OFF	ON	ON	ON	ON	OFF	ON	ON	ON	OFF
495	OFF	ON	ON	ON	ON	OFF	ON	ON	ON	ON
496	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF
497	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF	ON
498	OFF	ON	ON	ON	ON	ON	OFF	OFF	ON	OFF
499	OFF	ON	ON	ON	ON	ON	OFF	OFF	ON	ON
500	OFF	ON	ON	ON	ON	ON	OFF	ON	OFF	OFF
501	OFF	ON	ON	ON	ON	ON	OFF	ON	OFF	ON
502	OFF	ON	ON	ON	ON	ON	OFF	ON	ON	OFF
503	OFF	ON	ON	ON	ON	ON	OFF	ON	ON	ON
504	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF
505	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF	ON
506	OFF	ON	ON	ON	ON	ON	ON	OFF	ON	OFF
507	OFF	ON	ON	ON	ON	ON	ON	OFF	ON	ON
508	OFF	ON	ON	ON	ON	ON	ON	ON	OFF	OFF
509	OFF	ON	ON	ON	ON	ON	ON	ON	OFF	ON
510	OFF	ON	ON	ON	ON	ON	ON	ON	ON	OFF
511	OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON

Tabella 3-4: *Impostazione degli indirizzi DMX*

NB: ATTENZIONE: notare che sui dip-swtches S4, l'interruttore n. 1 è quello più a destra, il n. 10 quello più a sinistra, e che la posizione ON è verso il basso!

NB: notare che:

Indirizzo DMX	N. DIP-switch									
	10	9	8	7	6	5	4	3	2	1
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON

Entrambe le combinazioni impostano l'indirizzo n. 1.

NB: l'interruttore S4-10 non è utilizzato, e deve sempre rimanere impostato ad OFF.

Esempio:
NODO-MASTER DMX N. 1 impostato per RGB DIRETTA, NODO-MASTER DMX N. 2 impostato per MONOCHROME DIRETTA, NODO-MASTER DMX N. 3 impostato per MONOCHROME INDIRETTA:

NODO-MASTER DMX N. 1
S4 è impostato ad es. per indirizzo n. 5, quindi ON-OFF-ON-OFF-OFF-OFF-OFF-OFF-OFF-OFF
S2 è impostato a: ON-OFF-OFF-OFF, ed utilizza quindi 3 indirizzi

NODO-MASTER DMX N. 2
S4 deve essere impostato per l'indirizzo n. 8 (cioè il valore di S4 impostato su NODO-MASTER DMX N. 1 + il valore di S2 impostato su NODO-MASTER DMX N. 1).
Quindi S4 è impostato a: OFF-OFF-OFF-ON-OFF-OFF-OFF-OFF-OFF-OFF
S2 è impostato a: OFF-ON-OFF-OFF, ed utilizza quindi 1 indirizzo

NODO-MASTER DMX N. 3
S4 deve essere impostato per l'indirizzo n. 9 (cioè il valore di S4 impostato su NODO-MASTER DMX N. 2 + il valore di S2 impostato su NODO-MASTER DMX N. 2).
Quindi S4 è impostato a: ON-OFF-OFF-ON-OFF-OFF-OFF-OFF-OFF-OFF
S2 è impostato a: OFF-OFF-OFF-ON, ed utilizza quindi 1 indirizzo

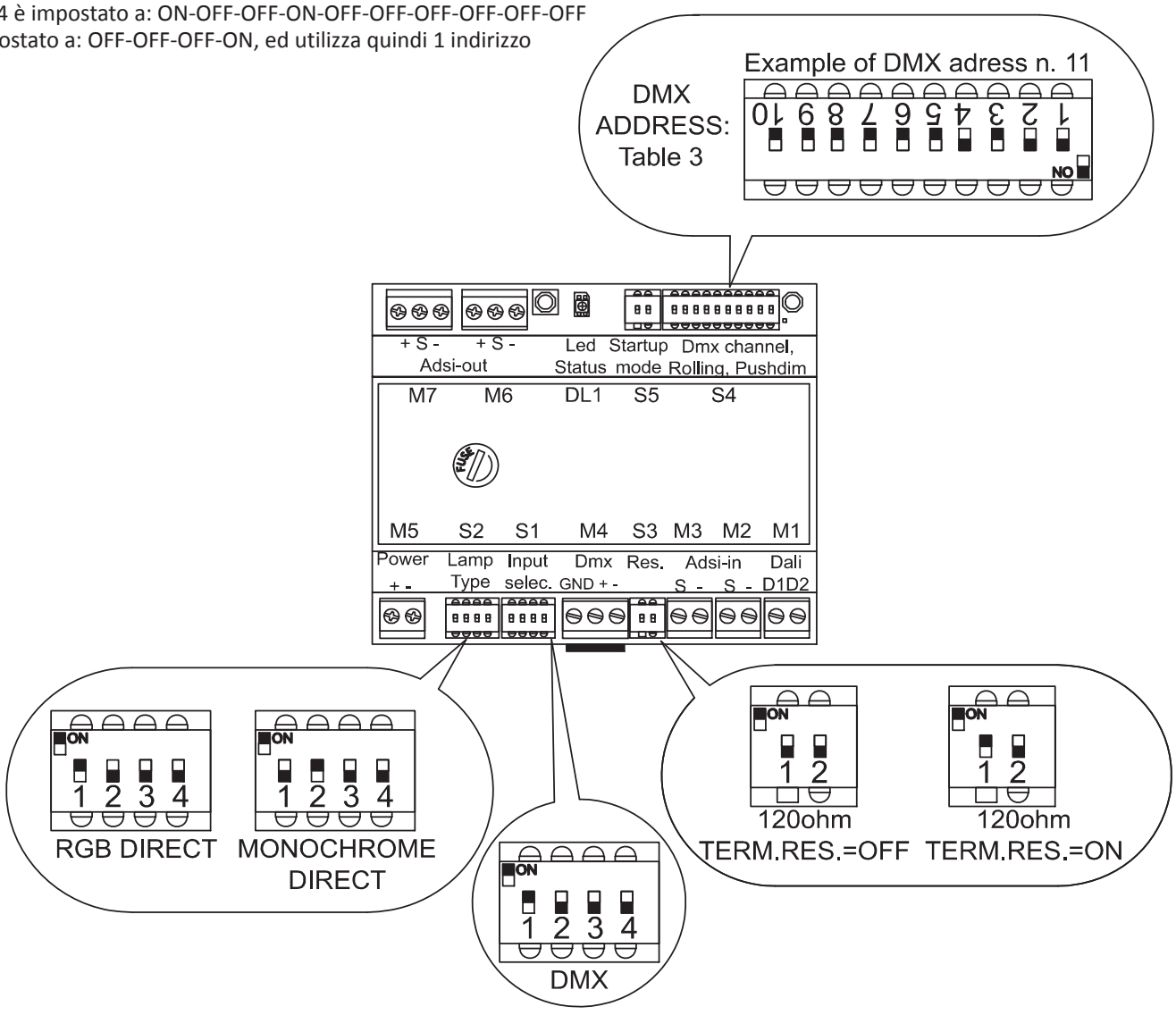


Fig. 7: *Impostazione dei dip-switches per la modalità "DMX"*
Si veda inoltre la Tabella 2 nel paragrafo 6.2 per differenti combinazioni di apparecchi e la Tabella 3 nel paragrafo 7.2 per l'impostazione degli indirizzi DMX

8 - IMPOSTARE NODO-MASTER IN MODALITÀ ‘SLAVE’

8.1 - COLLEGAMENTI

Usare cavi secondo quanto indicato nel paragrafo 5. Fare riferimento alle Figg. 3a e 3b.
Collegare i cavi di alimentazione dall’alimentatore al morsetto M5, rispettando la polarità.
Collegare il cavo verso gli apparecchi di illuminazione al morsetto M6, rispettando la polarità.
Collegare “–“ e “S” di M7 del NODO-MASTER DALI “Master” al “–“ e “S” di M2 dello NODO-MASTER “Slave”, rispettando la polarità, vedi Fig. 3b.
Sui NODO-MASTER “Slave” NON connettere né M1 al bus DALI né M4 al bus DMX.

8.2 - IMPOSTAZIONE DEI DIP-SWITCHES PER LA MODALITÀ ‘SLAVE’

Fare riferimento alla Fig. 8.

Per impostare il tipo di bus, individuare i dip-switches S1. Per impostare la modalità SLAVE:
- S1-1: OFF
- S1-2: OFF
- S1-3: ON
- S1-4: OFF

Per impostare i dip-switches S2: copiare sul NODO-MASTER “Slave” le impostazioni utilizzate per S2 sul NODO-MASTER “Master” al quale si è collegati come “Slave”. Gli indirizzi impostati mediante S2 sui NODO-MASTER “Slave” **NON** sono occupati sui bus DALI o DMX.

Nella modalità NODO-MASTER “Slave”, S3 e S4 non sono utilizzati.

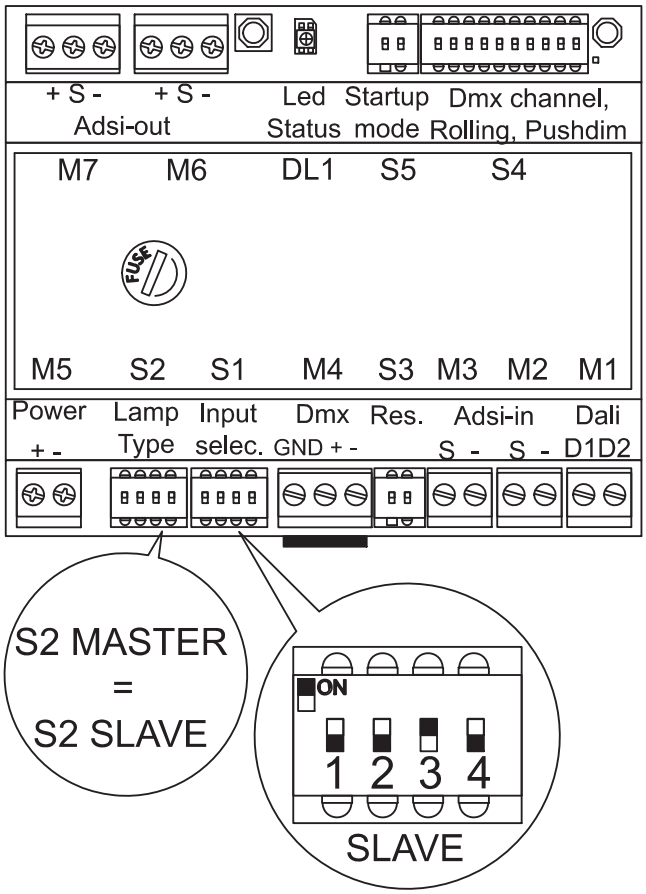


Fig. 8: *Impostazione dei dip-switches per modalità “SLAVE”*

9 - IMPOSTARE NODO-MASTER IN MODALITÀ 'ROLLING'

9.0 - INTRODUZIONE

La modalità "ROLLING" può essere utilizzata in installazioni semplici, per controllare il sistema senza la necessità di essere collegati ad un ambiente esterno DALI o DMX.
In questa modalità di funzionamento, è possibile:

- scegliere i colori tra i quali il sistema ciclerà: anche nel caso in cui il sistema fosse composto da moduli RGB, è possibile attivare solo alcuni colori (per es. in un sistema RGB è possibile escludere il Verde e lasciar ciclare solo il Rosso ed il Blu).
- scegliere la velocità utilizzata per ciclare.
- per mezzo di un pulsante, è possibile accendere o spegnere il sistema, ed inoltre attivare/arrestare la funzione rolling.

In questa modalità NODO-MASTER auto-genera sequenze di comandi, necessarie per accendere, spegnere e modulare l'intensità di tutte le tipologie di apparecchi.
Se per esempio i seguenti colori sono presenti lungo la tratta e sono correttamente attivati per mezzo dei dip-switches S4, la sequenza durante il rolling è la seguente:

RGB Diretta, nell'ordine rosso, verde, blu.
Monochrome diretta (bianco, rosso, verde, blu, ambra).
RGB Indiretta, nell'ordine rosso, verde, blu.
Monochrome Indiretta (bianco, rosso, verde, blu, ambra).

La modalità ROLLING può inoltre essere utilizzata per eseguire un test del sistema, prima di connettersi ad un ambiente DALI o DMX: se tutti i moduli funzionano correttamente nella modalità ROLLING, la ragione di un eventuale malfunzionamento che avvenisse dopo la connessione all'ambiente DALI o DMX deve essere ricercato nel bus DALI o DMX e/o sul rispettivo indirizzamento.

9.1 - COLLEGAMENTI

Usare cavi secondo quanto indicato nel paragrafo 5. Fare riferimento alle Figg. 3a e 3b.
Collegare i cavi dal pulsante ai morsetti M3 ed M5.
NB: usare un pulsante normalmente aperto per cortocircuitare il "+" tra i morsetti M3 e M5.
Collegare i cavi di alimentazione dall'alimentatore al morsetto M5, rispettando la polarità.
Collegare il cavo verso gli apparecchi di illuminazione al morsetto M6, rispettando la polarità.
In caso di configurazioni "Master-Slave", collegare "–" e "S" di M7 del NODO-MASTER DALI "Master" al "–" e "S" di M2 dello NODO-MASTER "Slave", rispettando la polarità, vedi Fig. 3b.

9.2 - IMPOSTAZIONE DEI DIP-SWITCHES PER MODALITÀ 'ROLLING'

Fare riferimento alla Fig. 9.

Per impostare la modalità ROLLING, individuare i dip-switches S1, ed impostarli su ciascuno dei NODO-MASTER indipendenti o sui NODO-MASTER "Master" (NON impostare S1 sui NODO-MASTER "Slave"):

S1-1: OFF
S1-2: OFF
S1-3: OFF
S1-4: ON.

NB: in questa modalità, verranno rispettate soltanto le sincronizzazioni create tra NODO-MASTER Master e NODO-MASTER Slave.

Se la modalità ROLLING è usata per eseguire il test del sistema prima dell'attivazione di un ambiente DALI o DMX, le sincronizzazioni mediante gruppi DALI o programmazione DMX tra i NODO-MASTER indipendenti ed i NODO-MASTER Master NON saranno rispettate.

Per **impostare i colori che il sistema utilizzerà per ciclare**, individuare i dip-switches S4 ed impostare gli interruttori da S4-1 a S4-8 secondo la Tabella 4. Quando l'interruttore numero "N" è impostato a ON, il canale (= colore) "N" ciclerà.

NB: notare che quando la sequenza da S4-1 a S4-8 dovesse essere impostata interamente a OFF, un particolare modo di funzionamento viene impostato, si veda il capitolo "IMPOSTARE NODO-MASTER NELLA MODALITA' PUSHDIM".

	DIP-switches S4							
	S4-8	**S4-7**	**S4-6**	**S4-5**	**S4-4**	**S4-3**	**S4-2**	**S4-1**
	Monocr. indiretto	Blu indiretto	Verde indiretto	Rosso indiretto	Monocr. diretto	Blu diretto	Verde diretto	Rosso diretto
RGB diretto	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
Rosso diretto	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
Rosso, blu diretto	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
RGB diretto, Monocromo indiretto	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Verde, blu diretto, RGB indiretto	OFF	ON	ON	ON	OFF	ON	ON	ON

Tabella 4: *Esempi di impostazioni dei dip-switches S4 nella modalità ROLLING per scegliere i colori tra i quali il sistema ciclerà.*

Per impostare la **velocità con la quale il sistema ciclerà**, individuare i dip-switches S4 ed impostare gli interruttori S4-9 e S4-10 secondo la Tabella 5.

Velocità	DIP-switches S4	
	S4-10	**S4-9**
Molto lenta	OFF	OFF
Lenta	OFF	ON
Media	ON	OFF
Veloce	ON	ON

Tabella 5: *Impostazione dei dip-switches S4 nella modalità ROLLING per scegliere la velocità con il quale il sistema ciclerà*

Per impostare la modalità RIACCENSIONE (si veda anche il punto 9.3), individuare i dip-switches S5 ed impostarli secondo la Tabella 6.

Modalità RIACCENSIONE	DIP-switches S5	
	S5-1	**S5-2**
"Sicurezza": il sistema rimane spento in seguito a mancanza e ritorno della energia elettrica	OFF	OFF
"Presa comandata": al ritorno dell'energia elettrica il sistema ripresenta l'ultimo scenario memorizzato	ON	OFF

Tabella 6: *Impostazione dei dip-switches S5 nella modalità ROLLING, per scegliere la modalità di RIACCENSIONE dopo una mancanza e ritorno di energia*

NB: ATTENZIONE, notare che il significato della modalità RIACCENSIONE è:

- **Sicurezza: permette al sistema di rimanere spento dopo una mancanze e ritorno di energia elettrica, anche se al momento della mancanza il sistema fosse stato acceso.**
- **Presa comandata: viene utilizzata per permettere l'accensione e spegnimento del sistema nella modalità ROLLING ad es. mediante un interruttore remoto o timer. L'ultimo scenario visualizzato verrà riproposto quando il sistema viene riattivato con interruttore remote o timer.**

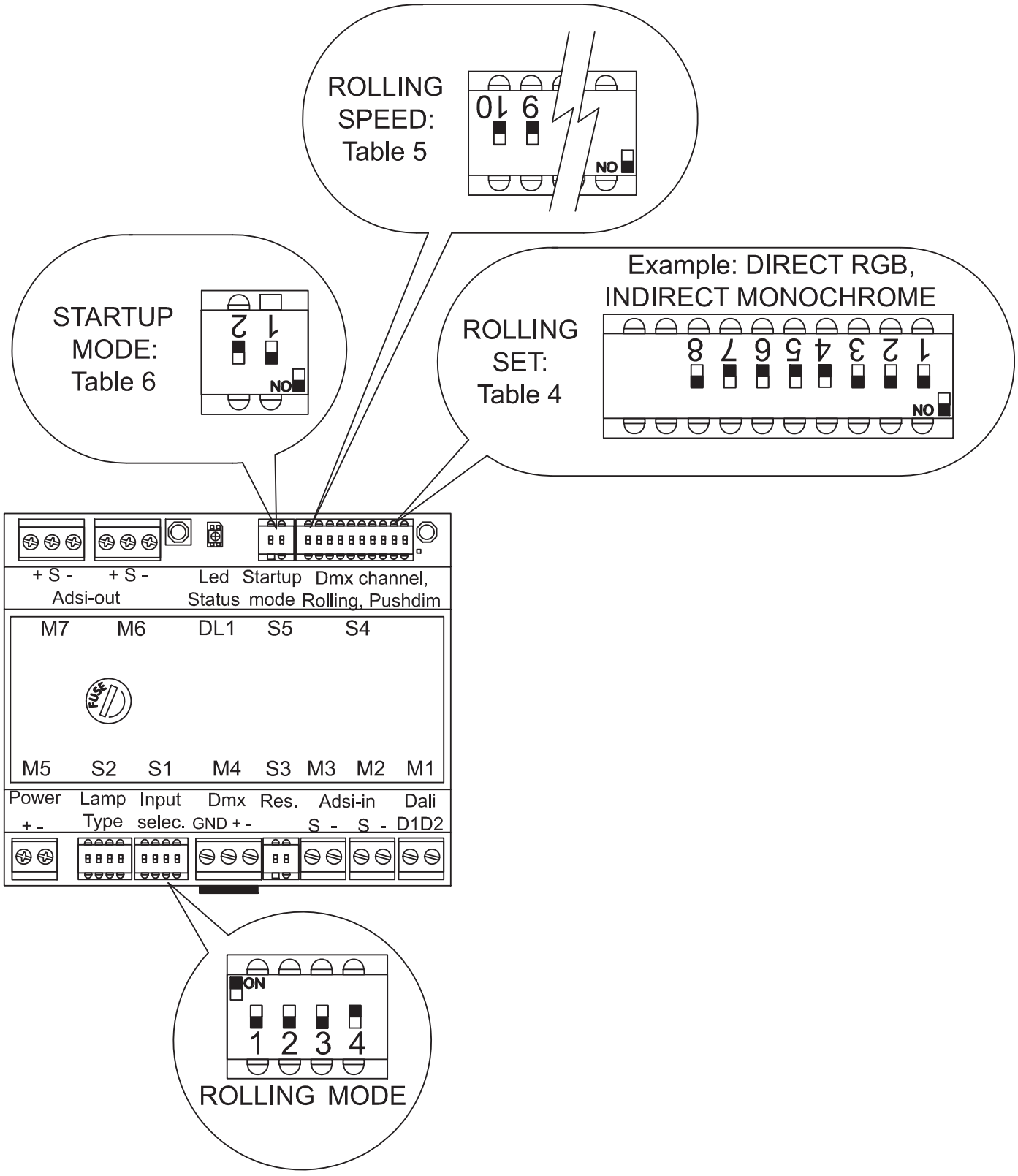


Fig. 9: *Impostazione dei dip-switches per la modalità "ROLLING"*

9.3 - UTILIZZO DI UN PULSANTE

Un pulsante normalmente aperto può essere collegato al morsetto M3, ed utilizzato per:
- Accendere o spegnere il sistema per mezzo di una pressione prolungata.
- Attivare ed arrestare il rolling per mezzo di una pressione "corta".
- **NON** è possibile modulare l'intensità del sistema per mezzo del pulsante.
- Nel caso sia necessario azionare diversi nodo-master con uno stesso pulsante, si possono collegare i diversi NODO-MASTER in configurazione master-slave, si veda fig. 3b ed il capitolo 8. Collegare il pulsante normalmente aperto al NODO-MASTER Master.

Esempi di utilizzo:
- **Attivare la modalità ROLLING ad ogni accensione:**
  - Impostare i dip-switches S5 sulla modalità "presa comandata".
  - Attivare manualmente la modalità ROLLING premendo a lungo il pulsante.
  - Spegnere il sistema, togliendo tensione per mezzo di un interruttore remoto o di un timer.
  - Quando il sistema sarà nuovamente alimentato mediante la chiusura dell'interruttore remoto o del timer, la modalità rolling sarà automaticamente riattivata.

- **Attivare una scena fissa ad ogni accensione:**
  - Impostare i dip-switches S5 sulla modalità "presa comandata".
  - Attivare manualmente la modalità ROLLING premendo a lungo il pulsante.
  - Attendere che il sistema raggiunga la scena colori desiderata.
  - Arrestare la modalità ROLLING mediante una pressione breve del pulsante.
  - Spegnere il sistema, togliendo tensione per mezzo di un interruttore remoto o di un timer.
  - Quando il sistema sarà nuovamente alimentato mediante la chiusura dell'interruttore remoto o del timer, la scena presente prima dello spegnimento del sistema sarà nuovamente riproposta.

10 - IMPOSTARE NODO-MASTER IN MODALITÀ 'PUSHDIM'

10.0 - INTRODUZIONE

La modalità "PUSHDIM" può essere utilizzata in installazioni semplici, per controllare sistemi MONOCHROME senza la necessità di essere collegati ad un ambiente esterno DALI o DMX.
In questa modalità di funzionamento, mediante la pressione di un pulsante è possibile:
- accendere o spegnere il sistema.
- modulare l'intensità luminosa del sistema.

In questa modalità NODO-MASTER auto-genera sequenze di comandi, necessarie per accendere, spegnere e modulare l'intensità di apparecchi MONOCHROME.

La modalità PUSHDIM può essere attivata solo su sistemi composti da moduli MONOCHROME, impostati sul canale 4 (MONOCHROME DIRETTO) o 8 (MONOCHROME INDIRETTO).

10.1 - COLLEGAMENTI

Usare cavi secondo quanto indicato nel paragrafo 5. Fare riferimento alle Figg. 3a e 3b.
Collegare i cavi dal pulsante ai morsetti M3 ed M5.
NB: usare un pulsante normalmente aperto per cortocircuitare il "+" tra i morsetti M3 e M5.
Collegare i cavi di alimentazione dall'alimentatore al morsetto M5, rispettando la polarità.
Collegare il cavo verso gli apparecchi di illuminazione al morsetto M6, rispettando la polarità.
In caso di configurazioni "Master-Slave", collegare "–" e "S" di M7 del NODO-MASTER DALI "Master" al "–" e "S" di M2 dello NODO-MASTER "Slave", rispettando la polarità, vedi Fig. 3b.

10.2 - IMPOSTAZIONE DEI DIP-SWITCHES PER LA MODALITÀ 'PUSHDIM'

Fare riferimento alla Fig. 10.

Per impostare la modalità PUSHDIM, individuare i dip-switches S1, ed impostarli su ciascuno dei NODO-MASTER indipendenti o sui NODO-MASTER "Master" (NON impostare S1 sui NODO-MASTER "Slave"):
S1-1: OFF
S1-2: OFF
S1-3: OFF
S1-4: ON

NB: in questa modalità, verranno rispettate soltanto le sincronizzazioni create tra NODO-MASTER Master e NODO-MASTER Slave.

Impostare quindi i dip-switches S4 secondo la Tabella 7:

	DIP-switches S4							
	S4-8	**S4-7**	**S4-6**	**S4-5**	**S4-4**	**S4-3**	**S4-2**	**S4-1**
	Monocr. Indiretto	Blu Indiretto	Verde Indiretto	Rosso Indiretto	Monocr. Diretto	Blu Diretto	Verde Diretto	Rosso Diretto
PUSHDIM	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

Tabella 7: *Impostazione dei dip-switches S4 per attivare la modalità PUSHDIM*

I dip-switches S4-9 e S4-10 relativi alla **velocità di ciclatura** non sono utilizzati in questa modalità.

Per impostare la modalità RIACCENSIONE (si veda anche il punto 10.3), individuare i dip-switches S5 ed impostarli secondo la Tabella 8.

Modalità RIACCENSIONE	**DIP-switches S5**	
	S5-1	**S5-2**
"Sicurezza": il sistema rimane spento in seguito a mancanza e ritorno della energia elettrica	OFF	OFF
"Presa comandata": al ritorno dell'energia elettrica il sistema ripresenta l'ultimo scenario memorizzato	ON	OFF

Tabella 8: *Impostazione dei dip-switches S5 nella modalità PUSHDIM, per scegliere la modalità di RIACCENSIONE dopo una mancanza e ritorno di energia elettrica.*

NB: ATTENZIONE, notare che il significato della modalità RIACCENSIONE è:
- **Sicurezza: permette al sistema di rimanere spento dopo una mancanze e ritorno di energia elettrica, anche se al momento della mancanza il sistema fosse stato acceso.**
- **Presa comandata: viene utilizzata per permettere l'accensione e spegnimento del sistema nella modalità ROLLING ad es. mediante un interruttore remoto o timer. L'ultimo scenario visualizzato verrà riproposto quando il sistema viene riattivato con interruttore remote o timer.**

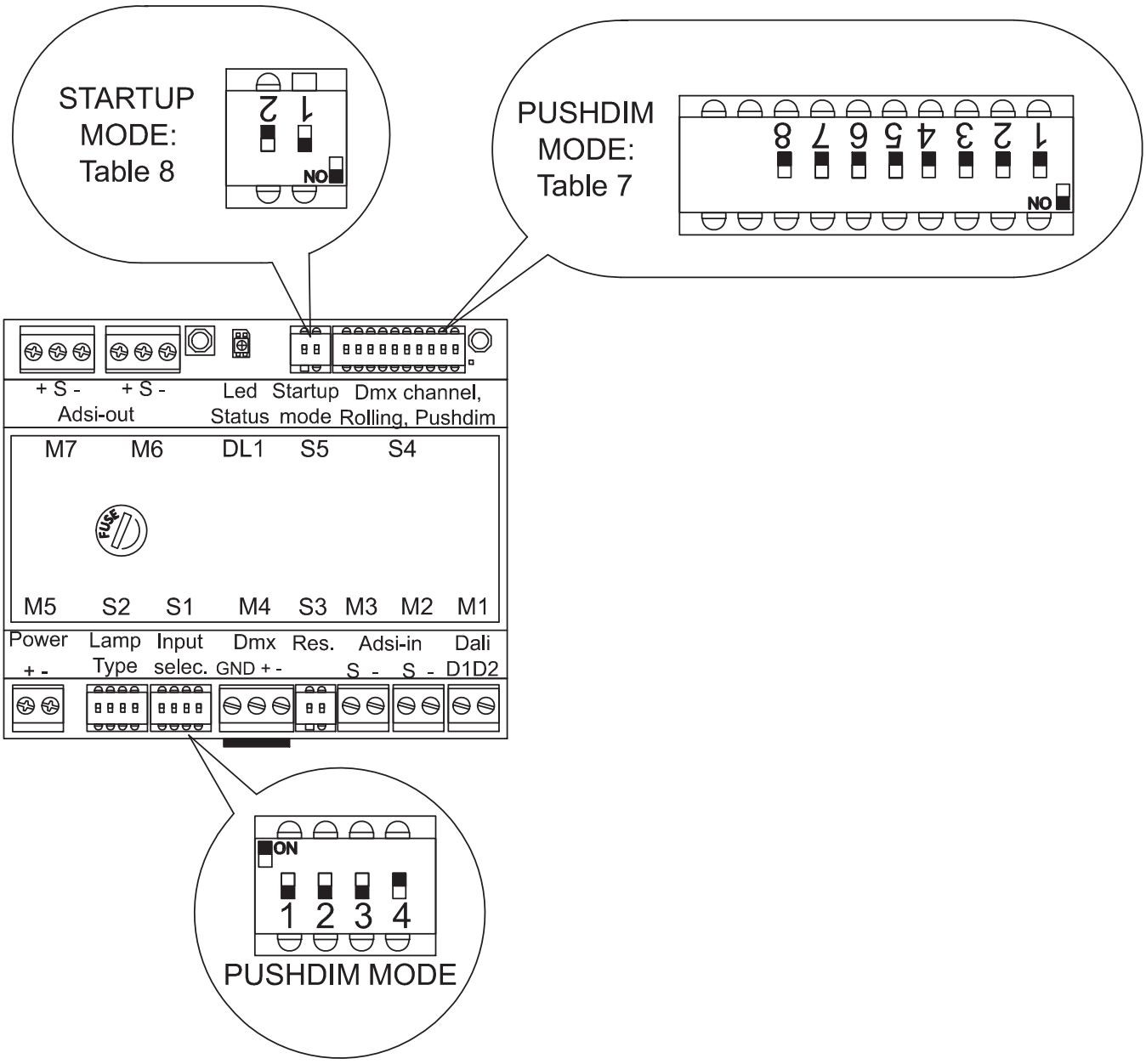


Fig. 10: *Impostazione dei dip-switches per attivare la modalità "PUSHDIM"*

10.3 - UTILIZZO DI UN PULSANTE

Un pulsante normalmente aperto può essere collegato al morsetto M3, ed utilizzato per:
- Accendere o spegnere il sistema per mezzo di una pressione “corta”.
- Modulare l’intensità del sistema per mezzo di una pressione prolungata:
- Quando premendo il pulsante si raggiunge il livello minimo o massimo di intensità, la modulazione è arrestata. E’ quindi necessario rilasciare il pulsante e premerlo nuovamente per invertire il senso di modulazione ed iniziare la modulazione.
- Ogni volta che il pulsante viene rilasciato e premuto nuovamente, il senso di modulazione viene invertito (ad es. se l’intensità diminuiva prima del rilascio del pulsante, crescerà in seguito alla successiva pressione).
- Nel caso sia necessario azionare diversi nodo-master con uno stesso pulsante, si possono collegare i diversi NODO-MASTER in configurazione master-slave, si veda fig. 3b ed il capitolo 8. Collegare il pulsante normalmente aperto al NODO-MASTER Master.

Esempi di utilizzo:
- **Attivare una scena con una certa intensità ad ogni accensione:**
  - Impostare i dip-switches S5 sulla modalità “presa comandata”.
  - Scegliere l’intensità desiderata premendo a lungo il pulsante.
  - Spegnere il sistema, togliendo tensione per mezzo di un interruttore remoto o di un timer.
  - Quando il sistema sarà nuovamente alimentato mediante la chiusura dell’interruttore remoto o del timer, la scena caratterizzata dalla intensità precedentemente scelta sarà automaticamente riattivata.

11 - TEST DEL SISTEMA, MESSAGGI DI ERRORE

In seguito all’alimentazione del Sistema, si possono presentare le seguenti situazioni:

a) Ogni tratta funziona correttamente, rispettando la sincronizzazione prevista dalle configurazioni master-slave (se previste), mostrando i colori nell’ordine corretto.

b) Gli apparecchi RGB (o alcuni di loro) rimangono stabilmente accesi alla massima intensità (quindi mostrano il colore BIANCO), mentre gli apparecchi MONOCHOME (o alcuni di loro) effettuano un ciclo dal minimo al massimo e quindi si stabilizzano alla massima intensità: questa situazione indica che il collegamento “S” tra NODO-MASTER e l’apparecchio che mostra il malfunziona mento non è ben realizzato (interruzione, falso contatto…).

c) “Status Led” sul NODO-MASTER mostra il colore VERDE FISSO, ma la tratta è spenta: questa situazione indica che il collegamento “+” e “-“ tra NODO-MASTER e la tratta non è ben realizzata (interruzione, falso contatto, polarità invertita, fusibile interrotto…).

d) “Status Led” sul NODO-MASTER è spento, e la tratta è spenta: questa situazione indica che la connessione “+” e “-“ tra l’alimentatore e NODO-MASTER non è ben realizzata (interruzione, falso contatto, polarità inversa). Verificare se sul morsetto M5 sia presente la tensione 48VDCcon la corretta polarità. In caso positivo, NODO-MASTER è guasto ed il fusibile interrotto.

e) “Status Led” sul NODO-MASTER è acceso, ma non VERDE FISSO. Verificare i seguenti casi:
- il led è ROSSO FISSO: NODO-MASTER è guasto o è presente un cortocircuito tra “+” e “-“ del morsetto M6 (o M7).
- il led è ROSSO per 1 sec. e VERDE per 1 sec.: sovraccarico sulla tratta alimentata mediante M6 (o M7) (basso voltaggio).
- il led è ROSSO per 2 sec. e VERDE per 2 sec.: sovratensione su M5.
- il led è ROSSO per 5 sec. e VERDE per 5 sec.: allarme di eccessiva temperatura su NODO-MASTER.

TABLE DES MATIÈRES

1 – INTRODUCTION

Le but des NODO-MASTER DALI et NODO-MASTER DALI/DMX est de connecter un environnement DALI ou DMX à des luminaires Artemide dotés d'un contrôleur ADSI (interface à signal numérique Artemide). En plus du bus DALI ou DMX, il est également possible d'activer un cycle de défilement automatique, ou une interface commandée par bouton-poussoir.

La principale caractéristique du bus ADSI à 3 fils, est la séparation du bus d'alimentation des bus de commande (bus numériques). Dans la limite de la puissance maximale autorisée induite par l'unité d'alimentation employée, et des contraintes liées à la section des câbles d'alimentation utilisée, il est possible de gérer des sections plus longues que celles permises par d'autres systèmes à 4 fils. L'utilisation de commandes numériques et d'agencements de circuits spécifiques permet de maintenir une luminosité constante entre tous les luminaires appartenant à une section, et il n'y a pas de différence de luminosité entre le dernier luminaire d'une section et le premier de la section suivante.

Une autre caractéristique intéressante est la possibilité de partager sur une même section des luminaires de différentes technologies et/ou fonctions : RVB direct diffusant, monochrome direct de puissance…

Dans les agencements complexes, chaque section peut offrir jusqu'à 8 canaux indépendants. Indépendamment des produits inscrits au catalogue, voici quelques exemples de configurations :
- Luminaires suspendus, lumière RGB directe diffusante (canaux n° 1, 2, 3), lumière blanche indirecte (canal n° 8)
- Plafonniers, lumière RGB directe de puissance (canaux n° 1, 2, 3), lumière bleue directe diffusante (canal n° 4)
- Encastrés de sol, lumière blanche directe diffusante (canal n° 4), lumière RVB diffusante (canaux n° 1, 2, 3).

Chaque canal utilisé sur un bus ADSI correspond à une adresse utilisée sur un bus DALI ou DMX.

NB : quand des appareils NODO-MASTER DALI ou NODO-MASTER DALI/DMX sont utilisés en mode DALI ou DMX, ils ne peuvent pas générer par eux-mêmes de commande ADSI. Il est donc toujours nécessaire que des commandes telles que l'allumage, l'extinction, la gradation, le rappel de scenarii soient générées par l'environnement DALI ou DMX. Il est par conséquent impératif de prévoir sur ces bus les dispositifs de commande appropriés.

Les appareils NODO-MASTER DALI ou NODO-MASTER DALI/DMX peuvent générer par eux-mêmes des commandes ADSI uniquement en mode ROLLING ou PUSHDIM, voir paragraphes 9 et 10.

Le terme « NODO-MASTER » sera utilisé ci-dessous tout à la fois pour « NODO-MASTER DALI » et pour « NODO-MASTER DALI/DMX ». Si une fonction est présente spécifiquement sur un type d'appareil, il sera précisé lequel :
- NODO-MASTER DALI : c.-à-d. NODO-MASTER DALI ou NODO-MASTER DALI/DMX en mode DALI
- NODO-MASTER DMX : c.-à-d. NODO-MASTER DALI/DMX en mode DMX.

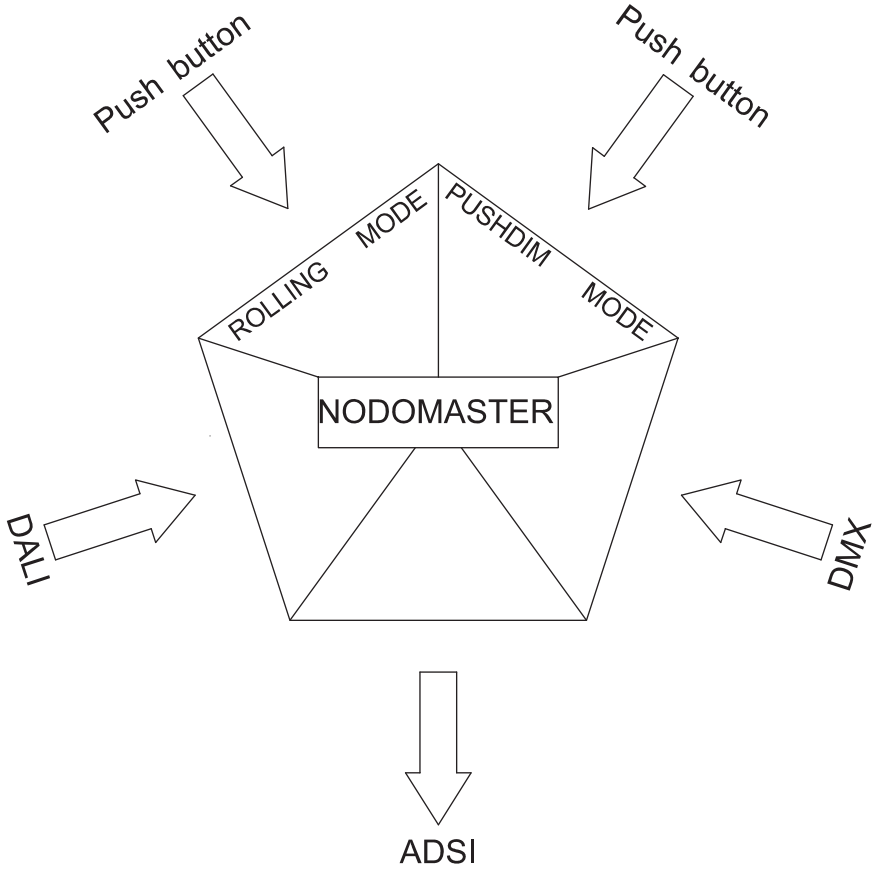


Fig. 1 : *Nodo-Master : interactions*

2 – AGENCEMENT DES LUMINAIRES, LIMITES IMPÉRATIVES

Voici quelques agencements types qui peuvent être utilisés pour connecter des luminaires ADSI à un NODO-MASTER.

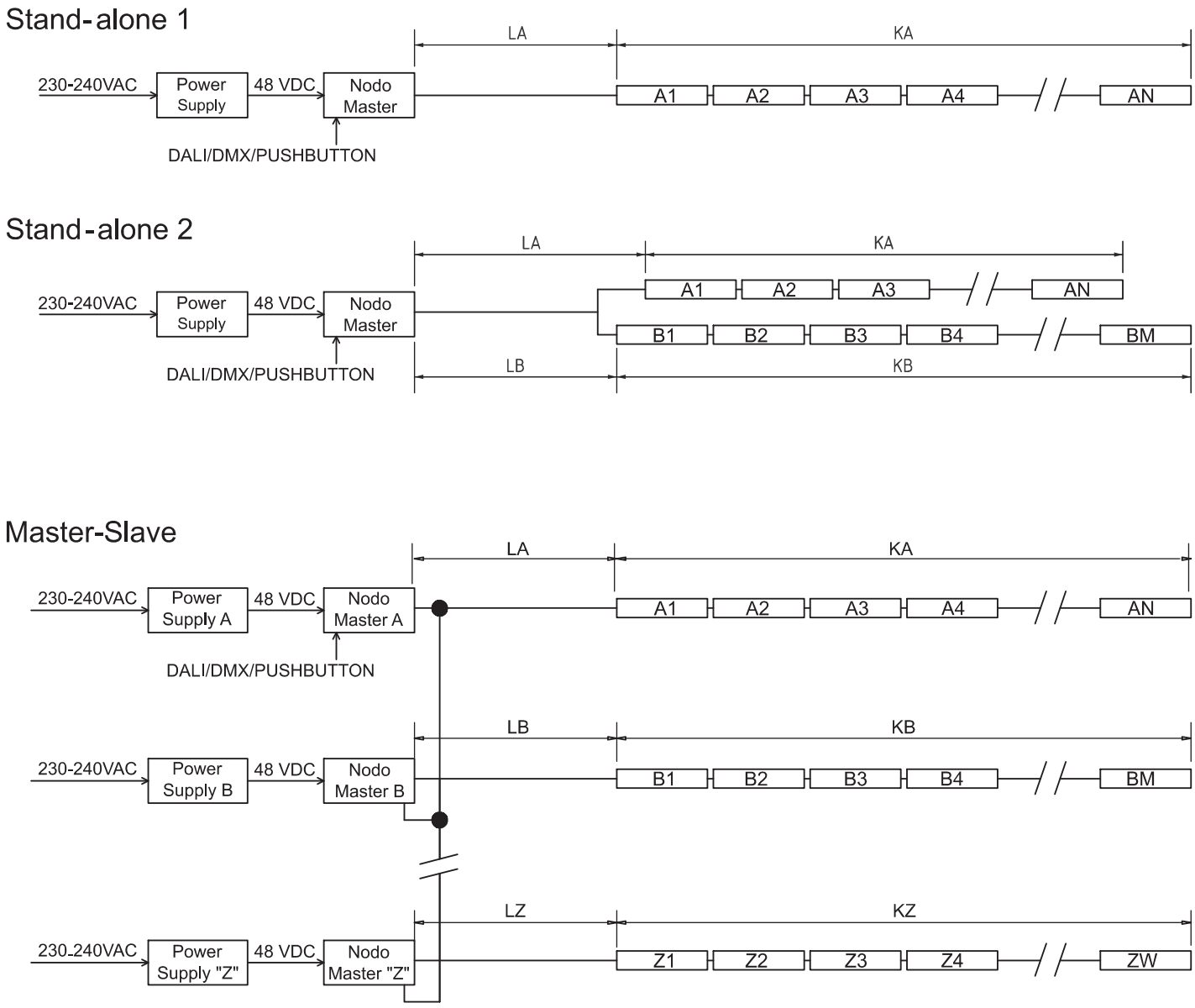


Fig. 2 : *Agencements types*

- Agencement « Stand-alone 1 » : unité d'alimentation, NODO-MASTER : c'est l'agencement le plus simple, l'unité d'alimentation et le NODO-MASTER n'alimentent qu'une seule section de luminaires.
- Agencement « Stand-alone 2 » : unité d'alimentation, NODO-MASTER, deux sections de luminaires : cet agencement est utilisé par exemple quand le NODO-MASTER est au milieu d'une section.
- Agencement « Maître-Esclave » : unité d'alimentation1, NODO-MASTER 1 pour Section 1 ; unité d'alimentation 2, NODO-MASTER 2 pour Section 2... : permet, en cas de sections extrêmement longues (supérieures aux limites du NODO-MASTER), de synchroniser chaque section entre elles. NODO-MASTER1 est le « maître » (le seul reconnu par l'environnement DALI/DMX, occupant ainsi les adresses sur le bus), tous les autres sont définis comme « esclave » (ils n'occupent pas d'adresses sur le bus DALI/DMX).

- Puissance maximale : généralement, la puissance maximale sur une section est limitée à 90 % de celle de l'unité alimentant le NODO-MASTER et la section. Voir le tableau 1 pour la puissance conseillée.

- Le nombre maximum de luminaires sur une section connectée à un NODO-MASTER est de 25. Dans la section « maître » d'un agencement « maître-esclave », le nombre de NODO -MASTER « esclaves » doit être inclus dans les 25 luminaires. Ainsi, par exemple, s'il y a 3 NODO-MASTER « esclaves » connectés au maître, le nombre maximum de luminaires dans la section maître est limité à 25-3 = 22. Voir également le tableau 1 pour les limites.

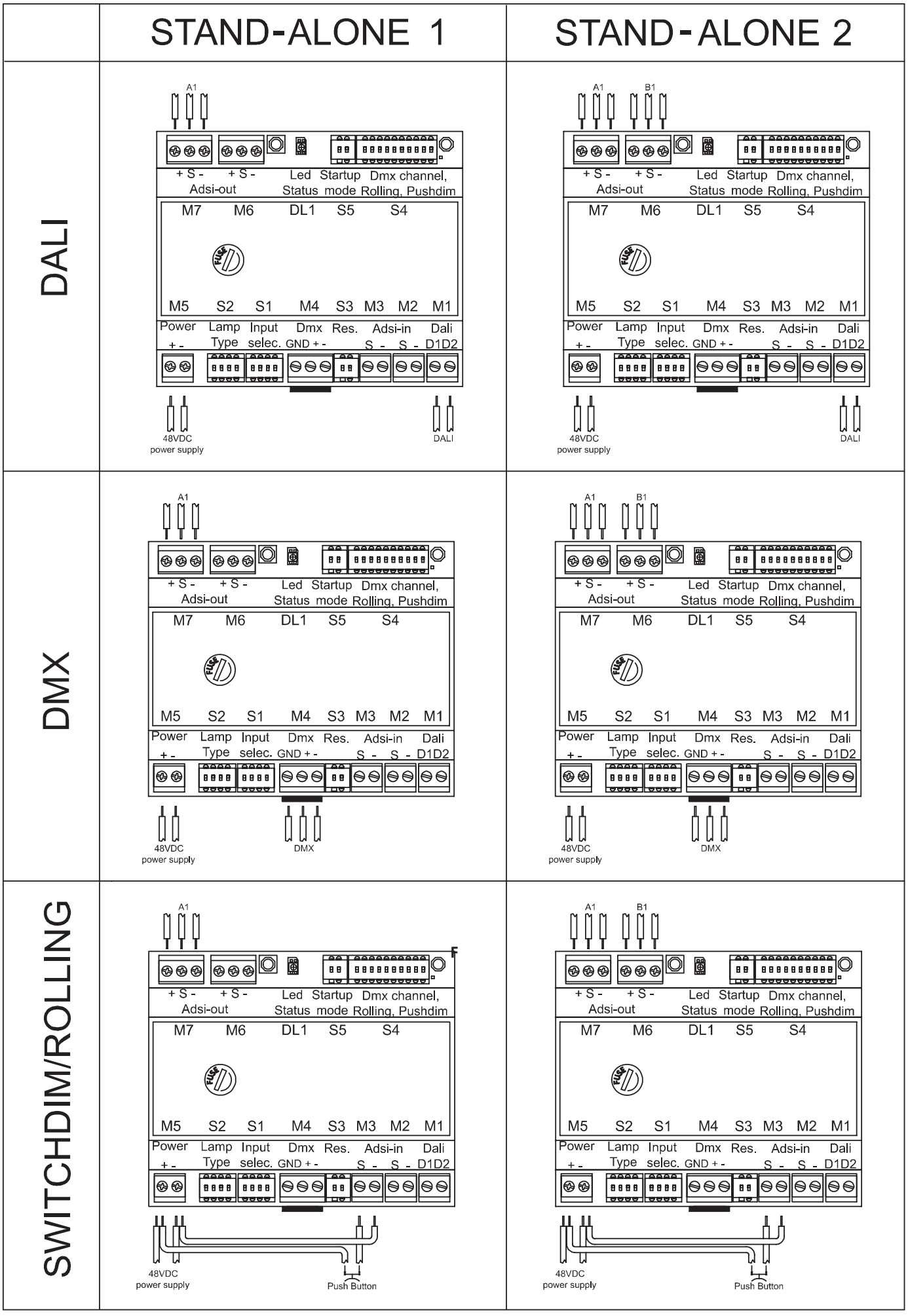
- Longueur maximale de la section connectée à un NODO-MASTER : dans la mesure où tous les luminaires sont contigus, sans espaces vides entre eux, si L est la longueur du câble entre le NODO-MASTER et le premier luminaire de la section (dans le cas Stand-alone 2, L = LA + LB) et K la longueur totale des modules (dans le cas Stand-alone 2, K = KA + KB), voir le tableau 1 ci-dessous afin de déterminer K.

- Les limites de longueur de section, le nombre maximum de luminaires sur la même section et la puissance maximale sont liés aux caractéristiques électriques des luminaires appartenant à la section, et à celles des câbles utilisés pour la continuité. Veuillez donc consulter les contraintes signalées dans le catalogue Artemide.

Type d'installation	Typologie de module	Longueur modules (m)	Section du câble d'alim° (mm²)	L (Longueur du câble d'alim°) (m)	K max (Lg. totale de modules) (m)	N. max de modules	Puissance unité d'alim° (W)
Encastré de sol	RGB	0.6	0.75	5	**12**	20	240
				10	**8.4**	14	
				15	**6.6**	11	
		0.9	0.75	5	**10.8**	12	240
				10	**9**	10	
				15	**7.2**	8	
			1.5	15	**10.8**	12	
			2.5	15	**12.6**	14	320
		1.2	1.5	5	**14.4**	12	320
				10	**12**	10	
				15	**10.8**	9	
			2.5	5	**14.4**	12	320
				10	**13.2**	11	
				15	**12**	10	
	Blanc	0.6	0.75	15	**12**	20	100
		0.9	0.75	15	**9.9**	11	100
				5	**18**	20	240
				10	**16.2**	18	
				15	**13.5**	15	
		1.2	0.75	5	**20.4**	17	240
				10	**16.8**	14	
				15	**13.2**	11	
			1.5	15	**18**	15	
Suspension Plafonnier Encastré	RGB	1.2	2.5	10	**15.6**	13	320
				15	**14.4**	12	
		2.4	2.5	10	**14.4**	6	320
				15	**12**	5	
	Blanc	1.2	2.5	20	**9.6**	8	320
				30	**7.2**	6	240
		2.4	2.5	20	**9.6**	4	320

Tableau 1 : *Contraintes d'agencement*

- Voir fig. 3a et 3b pour les connexions à effectuer sur le NODO-MASTER pour chacun des agencements mentionnés ci-dessus.



ig. 3a : *Connexions du Nodo-Master en mode "Stand-alone 1" et "Stand-alone 2"*
(Voir aussi 6.2, 7.2, 8.2, 9.2 et 10.2 pour le réglage des commutateurs DIP)

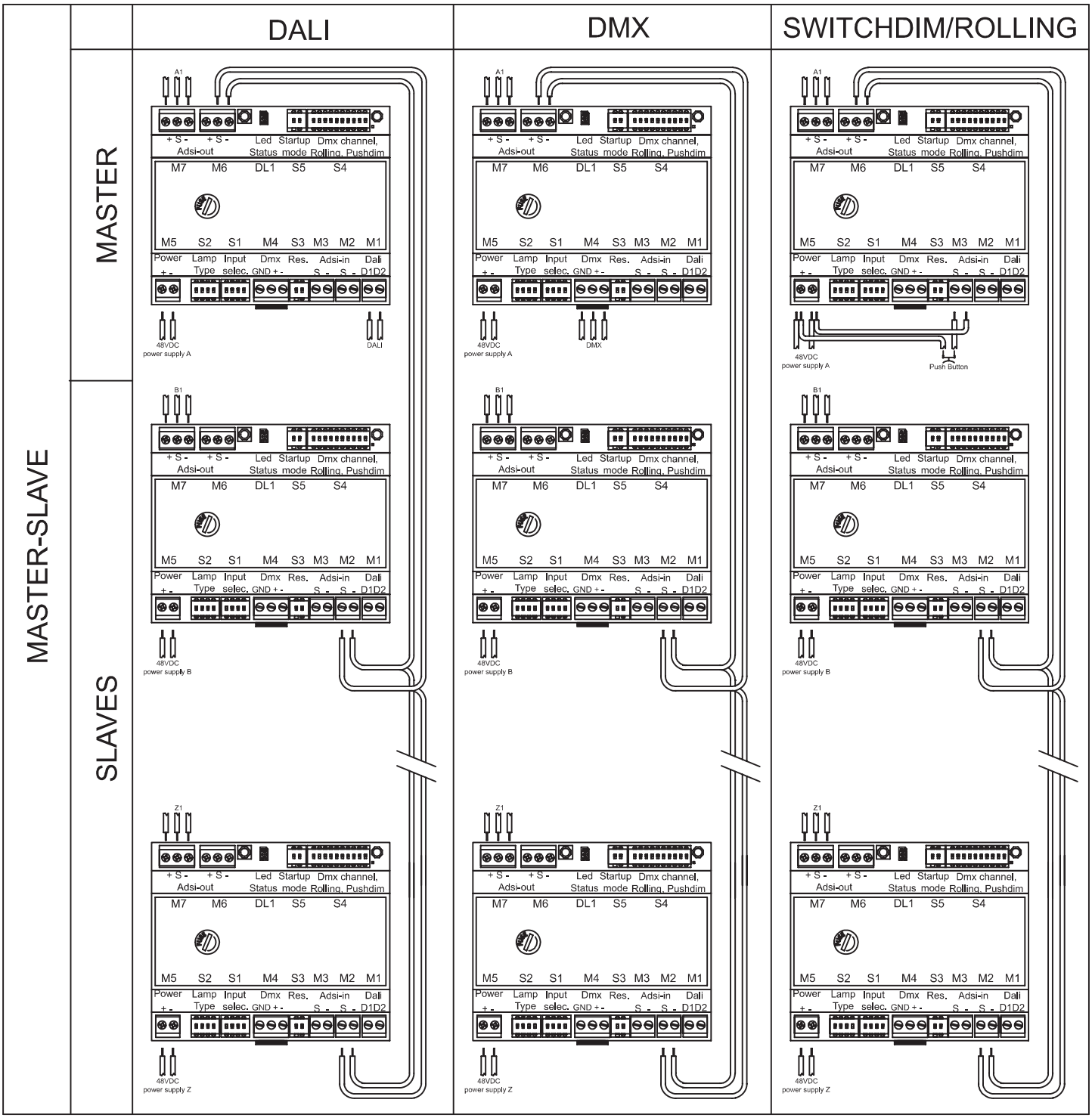


Fig. 3b : *Connexions du Nodo-Master en mode « Maître-Esclave »*
(Voir aussi 6.2, 7.2, 8.2, 9.2 et 10.2 pour le réglage des commutateurs DIP)

3 – FUSIBLES

Un fusible temporisé 10A (T10) Ø5 x 20 mm se trouve sur le panneau avant du NODO-MASTER, afin de protéger la ligne d'alimentation des luminaires.

4 – ALIMENTATION ÉLECTRIQUE

Utilisez les unités d'alimentation à tension constante conseillées par Artemide dans son catalogue, en tenant compte des contraintes de puissance liées à l'environnement et à la section (V_{OUT} = 48 VCC, max 480 W).

NB : Artemide décline toute responsabilité en cas d'utilisation d'unités d'alimentation non certifiées par Artemide.

5 – CARACTÉRISTIQUES DES CÂBLES

Veuillez vous référer à la fig. 4.

Du bloc d'alimentation au NODO-MASTER (borne M5) : utilisez des câbles compatibles avec l'environnement d'installation. Faites cette connexion la plus courte possible, utilisez au moins 2 x 2,5 mm². Utilisez éventuellement des câbles déjà intégrés au bloc d'alimentation, s'il y en a.

Du NODO-MASTER (bornes M6 et M7) au 1er luminaire de la section : utilisez le code éventuellement indiqué sur le catalogue (par ex. Algoritmo encastré dans le sol, 3 x 0,75 mm²).
A défaut, utilisez un câble 3 brins, compatible avec l'installation. Cette connexion devra être aussi courte que possible, la section minimale conseillée pour le câble est de 3 x 1,5 mm² (de préférence 3 x 2,5 mm²). Respectez la polarité '+', '-', 'S' indiquée sur le câble et sur les bornes.

Du bus DALI au NODO-MASTER (borne M1) : calculez la distance maximale entre l'unité de commande Dali (par ex. écran tactile, contrôleur de groupe, contrôleur de scène, ...) et le dispositif d'actionnement le plus lointain, notamment le NODO-MASTER : utilisez des sections de câbles supérieures à 0,5 mm² pour des distances allant jusqu'à 100 m, supérieures à 0,75 mm² pour des distances allant jusqu'à 150 m, supérieures à 1,5 mm² pour de plus longues distances. La distance maximale ne doit pas dépasser 300 m. Le bus DALI n'est pas polarisé.

Du bus DMX au NODO-MASTER (borne M4, pour NODO-MASTER DMX uniquement) : utilisez un câble à paire torsadée, par ex. un câble CAT5. Établissez une connexion, comme indiqué dans l'un des deux schémas de la Fig. 5. Respectez la polarité 'GND' (terre), '+', '-'.

Connexions pour l'agencement « maître-esclave » entre les bornes M2 et M6 : utilisez au minimum 2 x 0,5 mm², branchez les pôles '–' et 'S' sur le M6 ou le M7 du NODO-MASTER « Maître » aux mêmes pôles sur le M2 ou le M3 du NODO-MASTER « Esclave », en respectant la polarité.

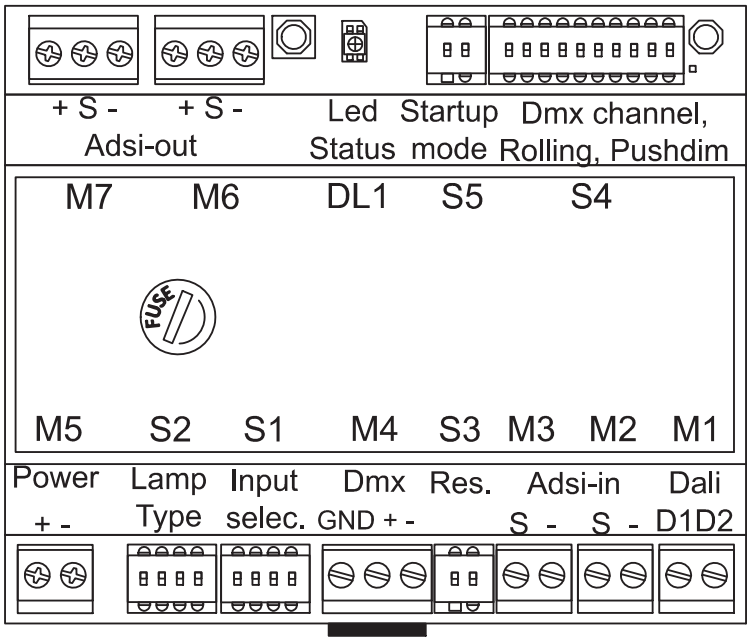


Fig. 4 : *Agencement des bornes du Nodo-Master*
(Voir aussi 6.2, 7.2, 8.2, 9.2 et 10.2 pour le réglage des commutateurs DIP)

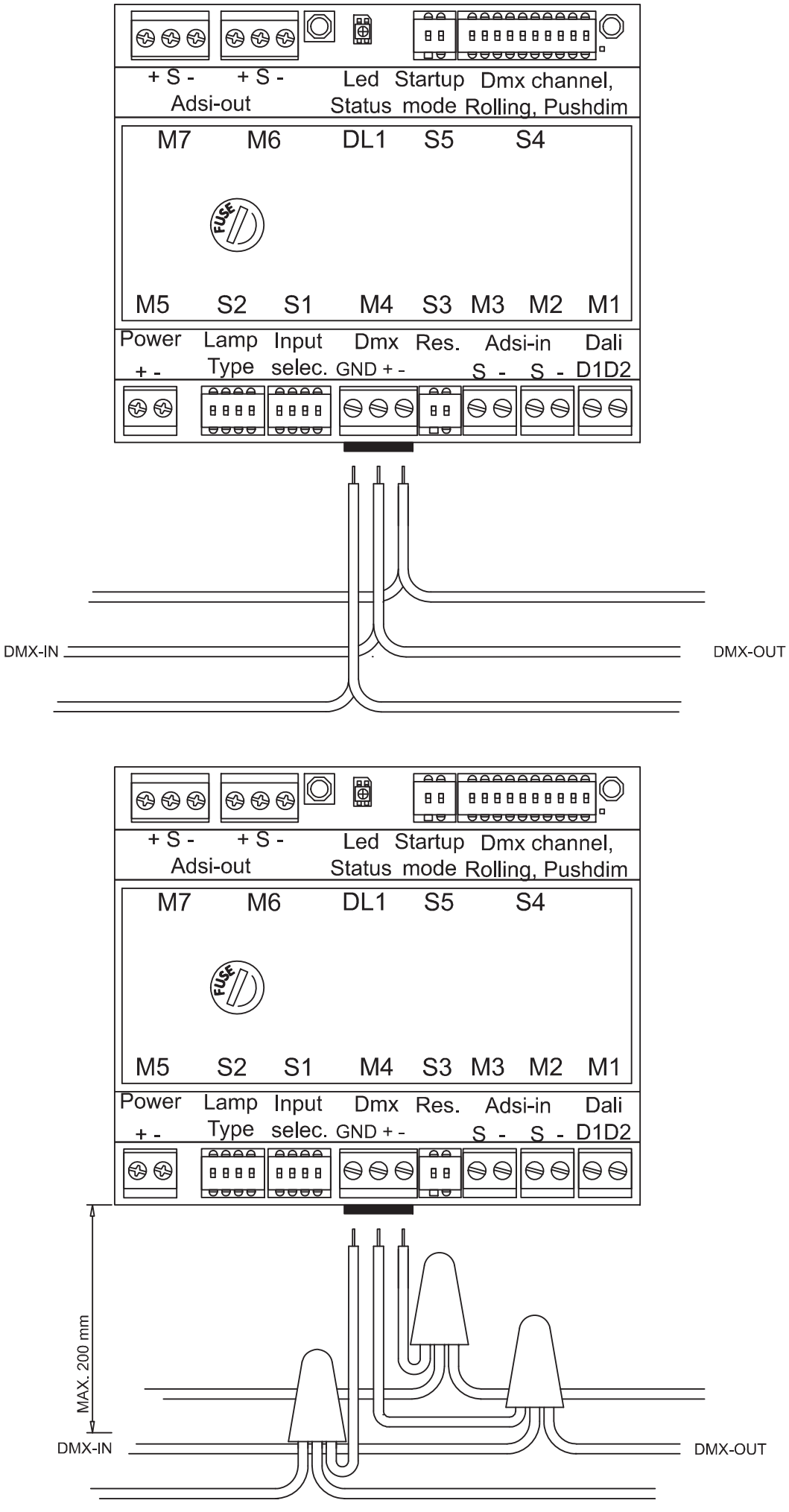


Fig. 5 : *Connexions du bus DMX*

6 – RÉGLAGE DU NODO-MASTER EN MODE « DALI »

6-1 - CONNEXIONS

Utilisez les câbles comme indiqué au paragraphe 5. Reportez-vous aux fig. 3a et 3b.
Branchez les câbles du bus DALI à la borne M1.
Branchez l'unité d'alimentation à la borne M5 en respectant la polarité.
Branchez à la borne M6 le câble allant vers les luminaires, en respectant la polarité.
En cas d'agencement « Maître-Esclave », connectez '-' et 'S' sur le M7 du NODO-MASTER DALI « Maître » à '-' et 'S' sur le M2 du NODO-MASTER « Esclave » en respectant la polarité, fig. 3b.

6.2 - RÉGLAGE DES COMMUTATEURS DIP POUR LE MODE DALI

Veuillez vous référer à la fig. 6.

Pour définir le type de bus, localisez les commutateurs DIP S1. Pour définir le bus DALI :
S1-1 : OFF
S1-2 : ON
S1-3 : OFF
S1-4 : OFF

Pour définir le nombre d'adresses réservées sur le bus, localisez les commutateurs DIP S2 :
- S'il n'y a que des luminaires RGB directs sur la section connectée au NODO-MASTER en cours de réglage, le NODO-MASTER DALI occupe 3 adresses. Réglez les commutateurs DIP S2 comme ci-dessous :
  S2-1 : ON
  S2-2 : OFF
  S2-3 : OFF
  S2-4 : OFF

- S'il n'y a que des luminaires monochromes directs (exclusivement blancs, rouges, verts, bleus ou ambres) sur la section connectée au NODO-MASTER en cours de réglage, le NODO-MASTER DALI occupe 1 adresse. Réglez les commutateurs DIP S2 comme ci-dessous :
  S2-1 : OFF
  S2-2 : ON
  S2-3 : OFF
  S2-4 : OFF

- S'il y a des luminaires (directs et indirects) RGB et/ou monochromes et/ou de typologie différente sur la section connectée au NODO-MASTER en cours de réglage, réglez les commutateurs DIP S2 en fonction de la situation réelle ; NODO-MASTER DALI occupe N adresses comme décrit dans le tableau 2 ci-joint (où ON = des luminaires sont présents, OFF = PAS de luminaires présents) :

Total adresses occupées	S2-1 (RGB DIRECT)	S2-2 (MONOCHROME DIRECT)	S2-3 (RGB INDIRECT)	S2-4 (MONOCHROME INDIRECT)
1	OFF	ON	OFF	OFF
1	OFF	OFF	OFF	ON
2	OFF	ON	OFF	ON
3	ON	OFF	OFF	OFF
3	OFF	OFF	ON	OFF
4	ON	ON	OFF	OFF
4	OFF	OFF	ON	ON
4	ON	OFF	OFF	ON
4	OFF	ON	ON	OFF
6	ON	OFF	ON	OFF
7	ON	ON	ON	OFF
7	ON	OFF	ON	ON
8	ON	ON	ON	ON

Tableau 2 : *Réglages des commutateurs DIP S2*

NB : en raison du nombre limité d'adresses (64) gérées par le protocole DALI, il est conseillé de toujours définir le nombre minimum d'adresses, de manière compatible avec les exigences de l'agencement.

S3 et S4 n'ont aucune signification quand le NODO-MASTER est en mode DALI.

6.3 - GESTION D'INSTALLATIONS ET D'ADRESSES COMPLEXES

Supposez que vous avez deux sections, chacune connectée à un NODO-MASTER DALI, et qu'il est nécessaire de synchroniser les couleurs des deux sections. Si les deux sections sont éloignées, et qu'il est donc difficile d'utiliser un agencement « maître-esclave », il est nécessaire de regrouper les adresses DALI en « groupes» (max 16) au moyen de « contrôleurs de groupe », comme prévu par le standard DALI.

Par exemple, dans le cas simple où il n'y a que des luminaires RGB, nous pourrions avoir (veuillez noter que le nombre d'adresses ne peut être vu qu'à l'aide d'une interface DALI-PC ou sur panneau de commande DALI) :

NODO-MASTER DALI N° 1 :
R = adresse n° 1
G = adresse n° 2
B = adresse n° 3

NODO-MASTER DALI N° 2 :
R = adresse n° 4
G = adresse n° 5
B = adresse n° 6

Ajoutez chaque adresse au groupe DALI approprié en suivant la procédure du contrôleur de groupe (ou panneau de commande) spécifique :
Groupe 1 (ROUGE) : adresse n° 1, adresse n° 4
Groupe 2 (VERT) : adresse n° 2, adresse n° 5
Groupe 3 (BLEU) : adresse n° 3, adresse n° 6

Les 3 groupes seront gérés par le biais de scènes (max 16) conformément au standard DALI, à l'aide de « contrôleurs de scènes ». Plusieurs scènes peuvent être rappelées en « séquences », si cela est prévu par le panneau de commande DALI utilisé.

En raison du fait que le protocole DALI attribue des adresses en mode aléatoire aux dispositifs situés le long du bus (notamment le NODO-MASTER), il se peut que les adresses attribuées à un NODOMASTER ne se suivent pas et/ou ne respectent pas l'ordre désiré.

Dans un tel cas, nous pourrions trouver, avec le même exemple que précédemment :

NODO-MASTER DALI N° 1 :
R = adresse n° 6
V = adresse n° 2
B = adresse n° 3

NODO-MASTER DALI N° 2 :
R = adresse n° 1
V = adresse n° 4
B = adresse n° 5

Dans ce cas, ajoutez comme suit des adresses DALI aux groupes DALI :
Groupe 1 (ROUGE) : adresse n° 6, adresse n° 1
Groupe 2 (VERT) : adresse n° 2, adresse n° 4
Groupe 3 (BLEU) : adresse n° 3, adresse n° 5

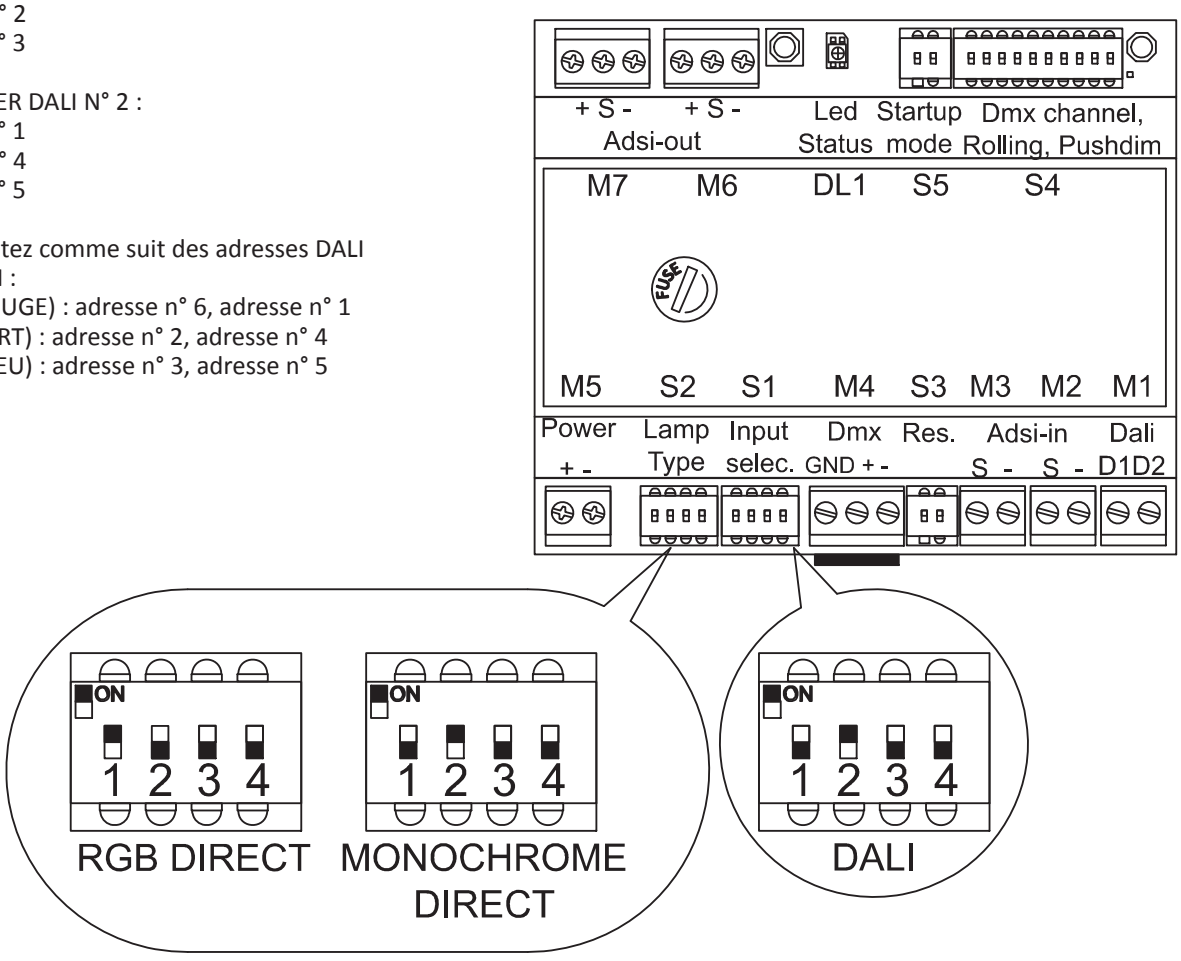


Fig. 6 : *Réglages des commutateurs DIP S2 en mode « Dali »,*
Voir aussi le tableau 2 au chapitre 6.2 pour d'autres combinaisons de luminaires

7 – RÉGLAGE DU NODO-MASTER DALI/DMX EN MODE « DMX »

7-1 - CONNEXIONS

Utilisez les câbles comme indiqué au paragraphe 5. Reportez-vous aux fig. 3a et 3b.
Branchez les câbles du bus DMX à la borne M5 en respectant la polarité. Utilisez une des deux manières illustrées sur la fig. 5.
Branchez l'unité d'alimentation à la borne M5 en respectant la polarité.
Branchez à la borne M6 le câble allant vers les luminaires, en respectant la polarité.
En cas d'agencement « Maître-Esclave », connectez les bornes '-' et 'S' sur le M7 du NODO-MASTER DMX « Maître » aux bornes '-' et 'S' sur le M2 du NODO-MASTER « Esclave » en respectant la polarité, fig. 3b.

7.2 - RÉGLAGE DES COMMUTATEURS DIP POUR LE MODE DMX

Veuillez vous référer à la fig. 7.

Pour définir le type de bus, localisez les commutateurs DIP S1. Pour définir le bus DMX :
S1-1 : ON
S1-2 : OFF
S1-3 : OFF
S1-4 : OFF

Pour définir le nombre d'adresses réservées sur le bus, localisez les commutateurs DIP S2 :
- S'il n'y a que des luminaires RGB directs sur la section connectée au NODO-MASTER en cours de réglage, le NODO-MASTER DMX occupe 3 adresses. Réglez les commutateurs DIP S2 comme ci-dessous :
  S2-1 : ON
  S2-2 : OFF
  S2-3 : OFF
  S2-4 : OFF.

- S'il n'y a que des luminaires monochromes directs (exclusivement blancs, rouges, verts, bleus ou ambres) sur la section connectée au NODO-MASTER en cours de réglage, le NODO-MASTER DMX occupe 1 adresse. Réglez les commutateurs DIP S2 comme ci-dessous :
  S2-1 : OFF
  S2-2 : ON
  S2-3 : OFF
  S2-4 : OFF.

- S'il y a des luminaires (directs et indirects) RGB et/ou monochromes et/ou de typologie différente sur la section connectée au NODO-MASTER en cours de réglage, réglez les commutateurs DIP S2 en fonction de la situation réelle ; NODO-MASTER DMX occupe N adresses comme décrit dans le tableau n° 2 ci-joint (où ON = des luminaires sont présents, OFF = PAS de luminaires présents).

Pour activer la résistance de terminaison DMX interne, localisez les commutateurs DIP S3.
D'après le standard DMX, le dernier périphérique connecté à un bus DMX doit avoir une résistance de 120 Ω entre son «+» et son «-». Cette résistance peut être activée en interne sur un NODO-MASTER DMX en réglant S3-1 sur ON.

Pour définir l'adresse DMX, localisez les commutateurs DIP S4.
Sur un bus DMX, chaque appareil doit avoir une adresse unique comprise entre 1 et 511.
Suite aux numéros d'adresses occupés par un NODO-MASTER DMX (voir valeur du commutateur DIP S2 dans le tableau n° 2), choisissez une adresse libre pour chaque NODO-MASTER DMX, et assignez-la à l'aide de commutateurs DIP S4.
Les commutateurs S4-1 à S4-9 sont utilisés pour sélectionner l'adresse DMX de départ occupée par le NODO-MASTER DMX. Voir tableau n° 3 ci-dessous utilisant un codage binaire, 0 = OFF, 1 = ON.

Adresse DMX	N. commutateur DIP									
	10	9	8	7	6	5	4	3	2	1
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
2	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
3	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
4	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
5	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
6	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF
7	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
8	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
9	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
10	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF
11	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
12	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
13	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
14	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
15	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON
16	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
17	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
18	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF
19	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
20	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
21	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
22	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
23	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON
24	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
25	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
26	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF
27	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON
28	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
29	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON
30	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF
31	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON
32	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
33	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
34	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
35	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
36	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
37	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
38	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
39	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON
40	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
41	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
42	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF
43	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON
44	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
45	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON
46	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF
47	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON
48	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
49	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
50	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF
51	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON
52	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
53	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON
54	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF
55	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON
56	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
57	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON
58	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF
59	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON
60	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF
61	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON
62	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF
63	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON

Adresse DMX	N. commutateur DIP									
	10	9	8	7	6	5	4	3	2	1
64	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
65	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
66	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF
67	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON
68	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
69	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
70	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF
71	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON
72	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
73	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON
74	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF
75	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON
76	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
77	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON
78	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF
79	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON
80	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
81	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON
82	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF
83	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON
84	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
85	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON
86	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF
87	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON
88	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
89	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON
90	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF
91	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON
92	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF
93	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON
94	OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF
95	OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON	ON
96	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
97	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON
98	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF
99	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON
100	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
101	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON
102	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF
103	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON
104	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
105	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON
106	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF
107	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON
108	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF
109	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON
110	OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF
111	OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON	ON
112	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
113	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON
114	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF
115	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON
116	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF
117	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON
118	OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF
119	OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON	ON
120	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF
121	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON
122	OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF
123	OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON	ON
124	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF
125	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF	ON
126	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF
127	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON

Tableau 3-1 : *Adressage DMX*

Adresse DMX	N. commutateur DIP									
	10	9	8	7	6	5	4	3	2	1
128	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
129	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
130	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF
131	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON
132	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
133	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON
134	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF
135	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON
136	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
137	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON
138	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF
139	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON
140	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
141	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON
142	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF
143	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON
144	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
145	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON
146	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF
147	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON
148	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
149	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON
150	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF
151	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON
152	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
153	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON
154	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF
155	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON
156	OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF
157	OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON
158	OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF
159	OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON	ON
160	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
161	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON
162	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF
163	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON
164	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
165	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON
166	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF
167	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON
168	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
169	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON
170	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF
171	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON
172	OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF
173	OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON
174	OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF
175	OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON	ON
176	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
177	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON
178	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF
179	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON
180	OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF
181	OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON
182	OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF
183	OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON	ON
184	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF
185	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON
186	OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF
187	OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON	ON
188	OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF
189	OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF	ON
190	OFF	OFF	ON	OFF	ON	ON	ON	ON	ON	OFF
191	OFF	OFF	ON	OFF	ON	ON	ON	ON	ON	ON

Adresse DMX	N. commutateur DIP									
	10	9	8	7	6	5	4	3	2	1
192	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
193	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
194	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF
195	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON
196	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
197	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON
198	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF
199	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON
200	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
201	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON
202	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF
203	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON
204	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF
205	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON
206	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF
207	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON	ON
208	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
209	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON
210	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF
211	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON
212	OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF
213	OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON
214	OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF
215	OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON	ON
216	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF
217	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON
218	OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF
219	OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON	ON
220	OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF
221	OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF	ON
222	OFF	OFF	ON	ON	OFF	ON	ON	ON	ON	OFF
223	OFF	OFF	ON	ON	OFF	ON	ON	ON	ON	ON
224	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
225	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON
226	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF
227	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON
228	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF
229	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON
230	OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF
231	OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON	ON
232	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF
233	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON
234	OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF
235	OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON	ON
236	OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF
237	OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF	ON
238	OFF	OFF	ON	ON	ON	OFF	ON	ON	ON	OFF
239	OFF	OFF	ON	ON	ON	OFF	ON	ON	ON	ON
240	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF
241	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON
242	OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF
243	OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON	ON
244	OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF
245	OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF	ON
246	OFF	OFF	ON	ON	ON	ON	OFF	ON	ON	OFF
247	OFF	OFF	ON	ON	ON	ON	OFF	ON	ON	ON
248	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF
249	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF	ON
250	OFF	OFF	ON	ON	ON	ON	ON	OFF	ON	OFF
251	OFF	OFF	ON	ON	ON	ON	ON	OFF	ON	ON
252	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF
253	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF	ON
254	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	OFF
255	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	ON

Tableau 3-2 : *Adressage DMX*

Adresse DMX	N. commutateur DIP									
	10	9	8	7	6	5	4	3	2	1
256	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
257	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
258	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
259	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
260	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
261	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
262	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF
263	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
264	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
265	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
266	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF
267	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
268	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
269	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
270	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
271	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON
272	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
273	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
274	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF
275	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
276	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
277	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
278	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
279	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON	ON
280	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
281	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
282	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON	OFF
283	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON	ON
284	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
285	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF	ON
286	OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON	OFF
287	OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON	ON
288	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
289	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
290	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
291	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
292	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
293	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
294	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
295	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON	ON
296	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
297	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
298	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON	OFF
299	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON	ON
300	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
301	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF	ON
302	OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON	OFF
303	OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON	ON
304	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
305	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
306	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON	OFF
307	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON
308	OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
309	OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF	ON
310	OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON	OFF
311	OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON	ON
312	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
313	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF	ON
314	OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON	OFF
315	OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON	ON
316	OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF	OFF
317	OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF	ON
318	OFF	ON	OFF	OFF	ON	ON	ON	ON	ON	OFF
319	OFF	ON	OFF	OFF	ON	ON	ON	ON	ON	ON

Adresse DMX	N. commutateur DIP									
	10	9	8	7	6	5	4	3	2	1
320	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
321	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
322	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF
323	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	ON
324	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
325	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
326	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON	OFF
327	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON	ON
328	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
329	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	ON
330	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON	OFF
331	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON	ON
332	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
333	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF	ON
334	OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON	OFF
335	OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON	ON
336	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
337	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	ON
338	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON	OFF
339	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON	ON
340	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
341	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON
342	OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON	OFF
343	OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON	ON
344	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
345	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF	ON
346	OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON	OFF
347	OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON	ON
348	OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF	OFF
349	OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF	ON
350	OFF	ON	OFF	ON	OFF	ON	ON	ON	ON	OFF
351	OFF	ON	OFF	ON	OFF	ON	ON	ON	ON	ON
352	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
353	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	ON
354	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON	OFF
355	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON	ON
356	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
357	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	ON
358	OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON	OFF
359	OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON	ON
360	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
361	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF	ON
362	OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON	OFF
363	OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON	ON
364	OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF	OFF
365	OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF	ON
366	OFF	ON	OFF	ON	ON	OFF	ON	ON	ON	OFF
367	OFF	ON	OFF	ON	ON	OFF	ON	ON	ON	ON
368	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
369	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF	ON
370	OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON	OFF
371	OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON	ON
372	OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF	OFF
373	OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF	ON
374	OFF	ON	OFF	ON	ON	ON	OFF	ON	ON	OFF
375	OFF	ON	OFF	ON	ON	ON	OFF	ON	ON	ON
376	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF	OFF
377	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF	ON
378	OFF	ON	OFF	ON	ON	ON	ON	OFF	ON	OFF
379	OFF	ON	OFF	ON	ON	ON	ON	OFF	ON	ON
380	OFF	ON	OFF	ON	ON	ON	ON	ON	OFF	OFF
381	OFF	ON	OFF	ON	ON	ON	ON	ON	OFF	ON
382	OFF	ON	OFF	ON	ON	ON	ON	ON	ON	OFF
383	OFF	ON	OFF	ON	ON	ON	ON	ON	ON	ON

Tableau 3-3 : *Adressage DMX*

Adresse DMX	N. commutateur DIP									
	10	9	8	7	6	5	4	3	2	1
384	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
385	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
386	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF
387	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	ON
388	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
389	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	ON
390	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON	OFF
391	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON
392	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
393	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	ON
394	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON	OFF
395	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON	ON
396	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
397	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	ON
398	OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON	OFF
399	OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON	ON
400	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
401	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	ON
402	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON	OFF
403	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON	ON
404	OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
405	OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF	ON
406	OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON	OFF
407	OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON	ON
408	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
409	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON
410	OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON	OFF
411	OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON	ON
412	OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF	OFF
413	OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF	ON
414	OFF	ON	ON	OFF	OFF	ON	ON	ON	ON	OFF
415	OFF	ON	ON	OFF	OFF	ON	ON	ON	ON	ON
416	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
417	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	ON
418	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON	OFF
419	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON	ON
420	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
421	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF	ON
422	OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON	OFF
423	OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON	ON
424	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
425	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF	ON
426	OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON	OFF
427	OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON	ON
428	OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF	OFF
429	OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF	ON
430	OFF	ON	ON	OFF	ON	OFF	ON	ON	ON	OFF
431	OFF	ON	ON	OFF	ON	OFF	ON	ON	ON	ON
432	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
433	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF	ON
434	OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON	OFF
435	OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON	ON
436	OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF	OFF
437	OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF	ON
438	OFF	ON	ON	OFF	ON	ON	OFF	ON	ON	OFF
439	OFF	ON	ON	OFF	ON	ON	OFF	ON	ON	ON
440	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF	OFF
441	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF	ON
442	OFF	ON	ON	OFF	ON	ON	ON	OFF	ON	OFF
443	OFF	ON	ON	OFF	ON	ON	ON	OFF	ON	ON
444	OFF	ON	ON	OFF	ON	ON	ON	ON	OFF	OFF
445	OFF	ON	ON	OFF	ON	ON	ON	ON	OFF	ON
446	OFF	ON	ON	OFF	ON	ON	ON	ON	ON	OFF
447	OFF	ON	ON	OFF	ON	ON	ON	ON	ON	ON

Adresse DMX	N. commutateur DIP									
	10	9	8	7	6	5	4	3	2	1
448	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
449	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
450	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON	OFF
451	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON
452	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
453	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF	ON
454	OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON	OFF
455	OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON	ON
456	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
457	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF	ON
458	OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON	OFF
459	OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON	ON
460	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF
461	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF	ON
462	OFF	ON	ON	ON	OFF	OFF	ON	ON	ON	OFF
463	OFF	ON	ON	ON	OFF	OFF	ON	ON	ON	ON
464	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
465	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF	ON
466	OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON	OFF
467	OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON	ON
468	OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF	OFF
469	OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF	ON
470	OFF	ON	ON	ON	OFF	ON	OFF	ON	ON	OFF
471	OFF	ON	ON	ON	OFF	ON	OFF	ON	ON	ON
472	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF	OFF
473	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF	ON
474	OFF	ON	ON	ON	OFF	ON	ON	OFF	ON	OFF
475	OFF	ON	ON	ON	OFF	ON	ON	OFF	ON	ON
476	OFF	ON	ON	ON	OFF	ON	ON	ON	OFF	OFF
477	OFF	ON	ON	ON	OFF	ON	ON	ON	OFF	ON
478	OFF	ON	ON	ON	OFF	ON	ON	ON	ON	OFF
479	OFF	ON	ON	ON	OFF	ON	ON	ON	ON	ON
480	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
481	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON
482	OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON	OFF
483	OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON	ON
484	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF	OFF
485	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF	ON
486	OFF	ON	ON	ON	ON	OFF	OFF	ON	ON	OFF
487	OFF	ON	ON	ON	ON	OFF	OFF	ON	ON	ON
488	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF	OFF
489	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF	ON
490	OFF	ON	ON	ON	ON	OFF	ON	OFF	ON	OFF
491	OFF	ON	ON	ON	ON	OFF	ON	OFF	ON	ON
492	OFF	ON	ON	ON	ON	OFF	ON	ON	OFF	OFF
493	OFF	ON	ON	ON	ON	OFF	ON	ON	OFF	ON
494	OFF	ON	ON	ON	ON	OFF	ON	ON	ON	OFF
495	OFF	ON	ON	ON	ON	OFF	ON	ON	ON	ON
496	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF
497	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF	ON
498	OFF	ON	ON	ON	ON	ON	OFF	OFF	ON	OFF
499	OFF	ON	ON	ON	ON	ON	OFF	OFF	ON	ON
500	OFF	ON	ON	ON	ON	ON	OFF	ON	OFF	OFF
501	OFF	ON	ON	ON	ON	ON	OFF	ON	OFF	ON
502	OFF	ON	ON	ON	ON	ON	OFF	ON	ON	OFF
503	OFF	ON	ON	ON	ON	ON	OFF	ON	ON	ON
504	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF
505	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF	ON
506	OFF	ON	ON	ON	ON	ON	ON	OFF	ON	OFF
507	OFF	ON	ON	ON	ON	ON	ON	OFF	ON	ON
508	OFF	ON	ON	ON	ON	ON	ON	ON	OFF	OFF
509	OFF	ON	ON	ON	ON	ON	ON	ON	OFF	ON
510	OFF	ON	ON	ON	ON	ON	ON	ON	ON	OFF
511	OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON

Tableau 3-4 : *Adressage DMX*

NB: veuillez noter que sur le commutateur DIP S4, le n° 1 est à droite, le 10 est à gauche et ON est en bas!

NB : veuillez également noter que :

Adresse DMX	N. commutateur DIP									
	10	9	8	7	6	5	4	3	2	1
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON

se rapportent tous deux à l'adresse n° 1.

NB : S4-10 n'est pas utilisé, et doit toujours être réglé sur OFF.

Exemple :
NODO-MASTER DMX N° 1 réglé sur RGB DIRECT, NODO-MASTER DMX N° 2 réglé sur MONOCHROME DIRECT, NODO-MASTER DMX N° 3 réglé sur MONOCHROME INDIRECT :

NODO-MASTER DMX N° 1
S4 est réglé par ex. sur l'adresse n° 5, donc ON-OFF-ON-OFF-OFF-OFF-OFF-OFF-OFF-OFF
S2 est réglé sur : ON-OFF-OFF-OFF, utilise 3 adresses

NODO-MASTER DMX N° 2
S4 doit être réglé sur l'adresse n° 8 (valeur S4 du NODO-MASTER DMX N°1 + valeur S2 du NODO-MASTER DMX N° 1).
S4 est donc réglé sur : OFF-OFF-OFF-ON-OFF-OFF-OFF-OFF-OFF-OFF
S2 est réglé sur : OFF-ON-OFF-OFF, utilise 1 adresse

NODO-MASTER DMX N° 3
S4 doit être réglé sur l'adresse n° 9 (valeur S4 du NODO-MASTER DMX N° 2 + valeur S2 du NODO-MASTER DMX N° 2).
S4 est donc réglé sur : ON-OFF-OFF-ON-OFF-OFF-OFF-OFF-OFF-OFF
S2 est réglé sur : OFF-OFF-OFF-ON, utilise 1 adresse

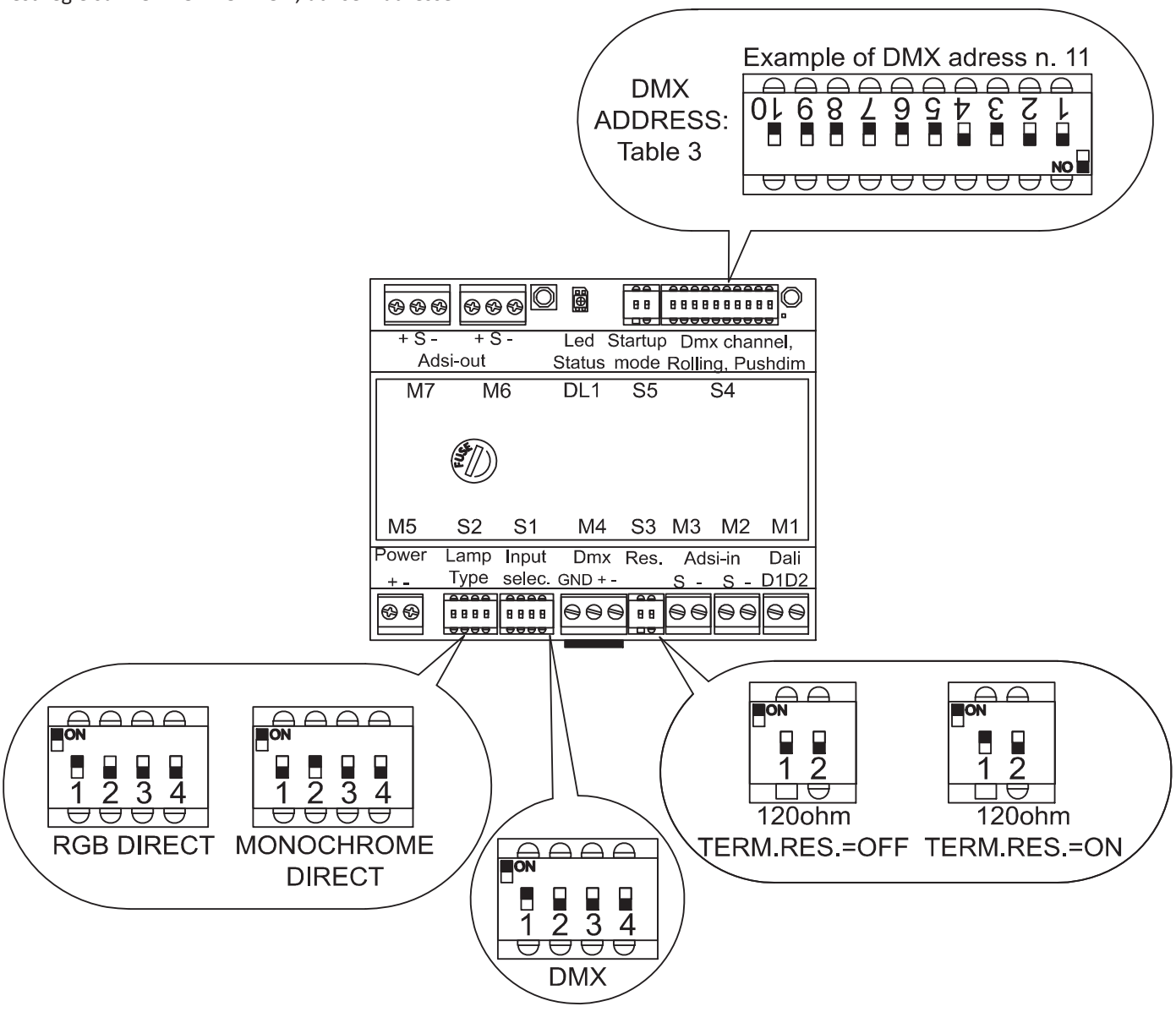


Fig. 7 : *Réglages des commutateurs DIP en mode « DMX » (Voir aussi le tableau 2 au chapitre 6.2 pour différentes combinaisons de luminaires et le tableau 3 au chapitre 7.2 pour l'adressage DMX)*

8 – RÉGLAGE DU NODO-MASTER EN MODE « ESCLAVE »

8-1 - CONNEXIONS

Utilisez les câbles comme indiqué au paragraphe 5. Reportez-vous à la fig. 3b.
Branchez l'unité d'alimentation à la borne M5 en respectant la polarité.
Branchez à la borne M6 le câble allant vers les luminaires, en respectant la polarité.
Connectez les bornes '-' et 'S' sur le M7 du NODO-MASTER « Maître » aux bornes '-' et 'S' sur le M2 du NODO-MASTER « Esclave », en respectant la polarité.
Pour ce qui concerne le NODO-MASTER « esclave », ne connectez pas le M1 à un bus DALI ni le M4 à un bus DMX.

8.2 - RÉGLAGE DES COMMUTATEURS DIP POUR LE MODE « ESCLAVE »

Veuillez vous référer à la fig. 8.

Pour définir le type de bus, localisez les commutateurs DIP S1. Pour régler sur ESCLAVE :
- S1-1 : OFF
- S1-2 : OFF
- S1-3 : ON
- S1-4 : OFF

Pour régler S2 : copiez sur le NODO-MASTER « Esclave » les réglages utilisés sur le NODO-MASTER « Maître » auquel il est connecté. Les adresses définies sur le NODO-MASTER « Esclave » ne sont PAS occupées sur les bus DALI ou DMX.

S3 et S4 n'ont aucune signification quand le NODO-MASTER est en mode « Esclave ».

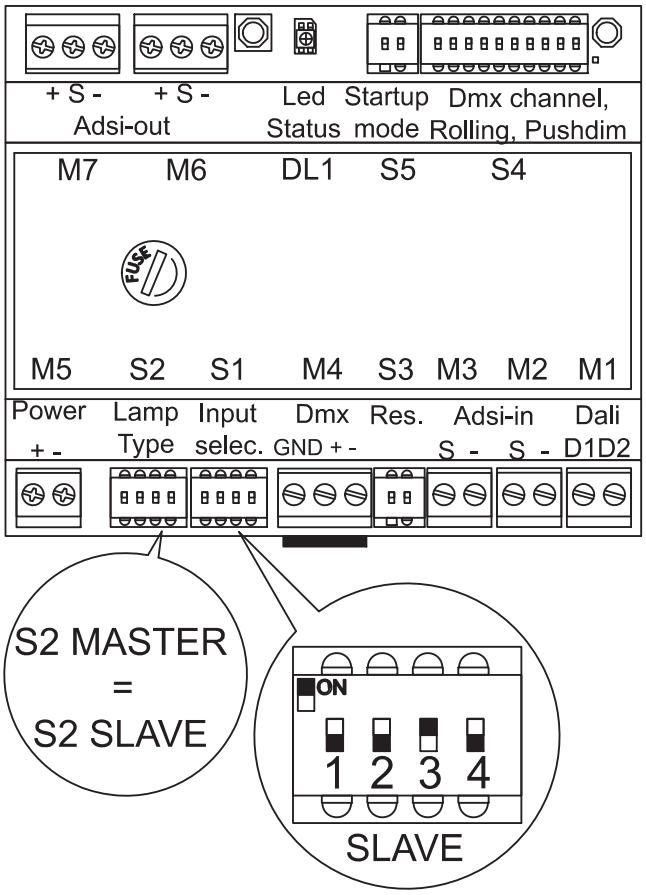


Fig. 8 : *Réglages des commutateurs DIP en mode « ESCLAVE »*

9 – RÉGLAGE DU NODO-MASTER EN MODE « ROLLING » (DÉFILEMENT AUTOMATIQUE)

9.0 - INTRODUCTION

Le mode « ROLLING » peut être utilisé dans des installations simples pour piloter le système sans nécessiter un environnement DALI ou DMX externe.

Dans ce mode de fonctionnement, il est possible :
- De choisir les couleurs participant au défilement : même si le système est composé de modules RGB, il est possible de n'inclure dans le défilement que les couleurs désirées (par ex., dans un système RGB il est possible d'exclure le VERT et ne laisser que le ROUGE et le BLEU dans le défilement),
- De choisir la vitesse de défilement,
- A l'aide d'un bouton-poussoir, il est possible d'activer et de désactiver le système et de démarrer et arrêter le défilement.

Dans ce mode, le NODO-MASTER génère par lui-même une séquence de commandes nécessaire pour mettre en marche, arrêter et faire varier toutes les typologies de luminaires.
Pour autant que les « couleurs » suivantes soient présentes sur la section et correctement activées au moyen de commutateurs DIP S4, l'ordre utilisé lors du test est le suivant :

RGB direct, dans l'ordre rouge, vert, bleu
Monochrome direct (blanc, rouge, vert, bleu, ambre)
RGB indirect, dans l'ordre rouge, vert, bleu
Monochrome indirect (blanc, rouge, vert, bleu, ambre).

Le mode ROLLING peut également être utilisé afin de tester le système avant d'activer l'environnement DALI ou DMX : si tous les modules fonctionnent bien en mode ROLLING, la raison d'une éventuelle défaillance se produisant après l'activation du DALI ou du DMX doit être recherchée sur le bus DALI ou DMX et/ou dans l'adressage du NODOMASTER.

9.1 - CONNEXIONS

Utilisez les câbles comme indiqué au paragraphe 5. Reportez-vous aux fig. 3a et 3b.
Branchez le bouton-poussoir aux bornes M3-M5.
NB : utilisez un bouton-poussoir « normalement ouvert » pour court-circuiter les « + » sur les bornes M3 et M5.
Branchez l'unité d'alimentation à la borne M5 en respectant la polarité.
Branchez à la borne M6 le câble allant vers les luminaires, en respectant la polarité.
En cas d'agencement « Maître-Esclave », connectez les bornes '-' et 'S' sur le M7 du NODO-MASTER DMX « Maître » aux bornes '-' et 'S' sur le M2 du NODO-MASTER « Esclave », en respectant la polarité, fig. 3b.

9.2 - RÉGLAGES DES COMMUTATEURS DIP POUR LE MODE ROLLING

Veuillez vous référer à la fig. 9.

Pour régler en mode ROLLING, localisez les commutateurs DIP S1 et réglez-les comme suit sur chaque NODO-MASTER autonome ou « Maître » (ne réglez PAS S1 sur un NODO-MASTER « Esclave ») :

S1-1 : OFF
S1-2 : OFF
S1-3 : OFF
S1-4 : ON

NB : dans ce mode, seules sont reproduites les synchronisations entre NODO-MASTER « Maître » et NODO-MASTER « Esclave ».

Si le mode ROLLING est utilisé pour tester le système avant l'installation de DALI ou de DMX, les synchronisations entre les différents NODO-MASTER « Maître » ou les différents NODO-MASTER autonomes qui sont effectuées au moyen de regroupements DALI ou DMX ne seront PAS réalisées en mode ROLLING.

Pour définir les canaux participant au défilement, localiser les commutateurs DIP S4 et réglez les commutateurs DIP 1-8 comme indiqué dans le tableau 4 ci-après. Lorsque le commutateur DIP numéro 'N' est réglé sur ON, le canal 'N' est inclus dans le défilement.

NB : Veuillez noter que si tous les commutateurs DIP sont sur OFF, un mode de fonctionnement spécial sera défini, voir le chapitre « RÉGLAGE DU NODO-MASTER EN MODE PUSHDIM ».

	Commutateurs DIP S4							
	S4-8	**S4-7**	**S4-6**	**S4-5**	**S4-4**	**S4-3**	**S4-2**	**S4-1**
	Indirect Monochr.	Indirect Bleu	Indirect Vert	Indirect Rouge	Direct Monochr.	Direct Bleu	Direct Vert	Direct Rouge
Direct RGB	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
Direct Rouge	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
Direct Rouge, Bleu	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
Direct RGB, Indirect Monochr.	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Direct Vert, Bleu Indirect RGB	OFF	ON	ON	ON	OFF	ON	ON	ON

Tableau 4 : *Exemples de réglages des commutateurs DIP S4 en mode ROLLING pour choisir les couleurs participant au défilement*

Pour régler la **vitesse de défilement**, localisez les commutateurs DIP S4 et réglez les commutateurs DIP 9-10 comme dans le tableau 5 ci-après.

Vitesse	**Commutateurs DIP S4**	
	S4-10	**S4-9**
Très lente	OFF	OFF
Lente	OFF	ON
Moyenne	ON	OFF
Rapide	ON	ON

Tableau 5 : *Réglage des commutateurs DIP S4 en mode ROLLING pour choisir la vitesse de défilement*

Pour mettre en mode **SWITCH-ON** (voir également 9.3 ci-dessous), localisez les commutateurs DIP S5 et réglez-les comme indiqué dans le tableau 6.

Mode SWITCH-ON	**Commutateurs DIP S5**	
	S5-1	**S5-2**
Sécurité : après rétablissement de l'alimentation électrique suite à une panne du réseau, le système reste éteint	OFF	OFF
Interrupteur mural : après rétablissement de l'alimentation électrique suite à une panne du réseau, le système restaure la dernière scène sauvegardée	ON	OFF

Tableau 6 : *Réglage des commutateurs DIP S5 en mode ROLLING pour choisir le mode SWITCH-ON après rétablissement de l'alimentation électrique suite à une panne du réseau.*

NB : veuillez noter que le sens de ces modes est :
- **Sécurité : pour que le système reste éteint pour plus de sureté après rétablissement de l'alimentation électrique suite à une panne du réseau**
- **Interrupteur mural : pour être en mesure d'activer et de désactiver le système au moyen d'un interrupteur mural ou d'une minuterie. La dernière scène sauvegardée sera restaurée lors de la réactivation de l'interrupteur mural ou de la minuterie.**

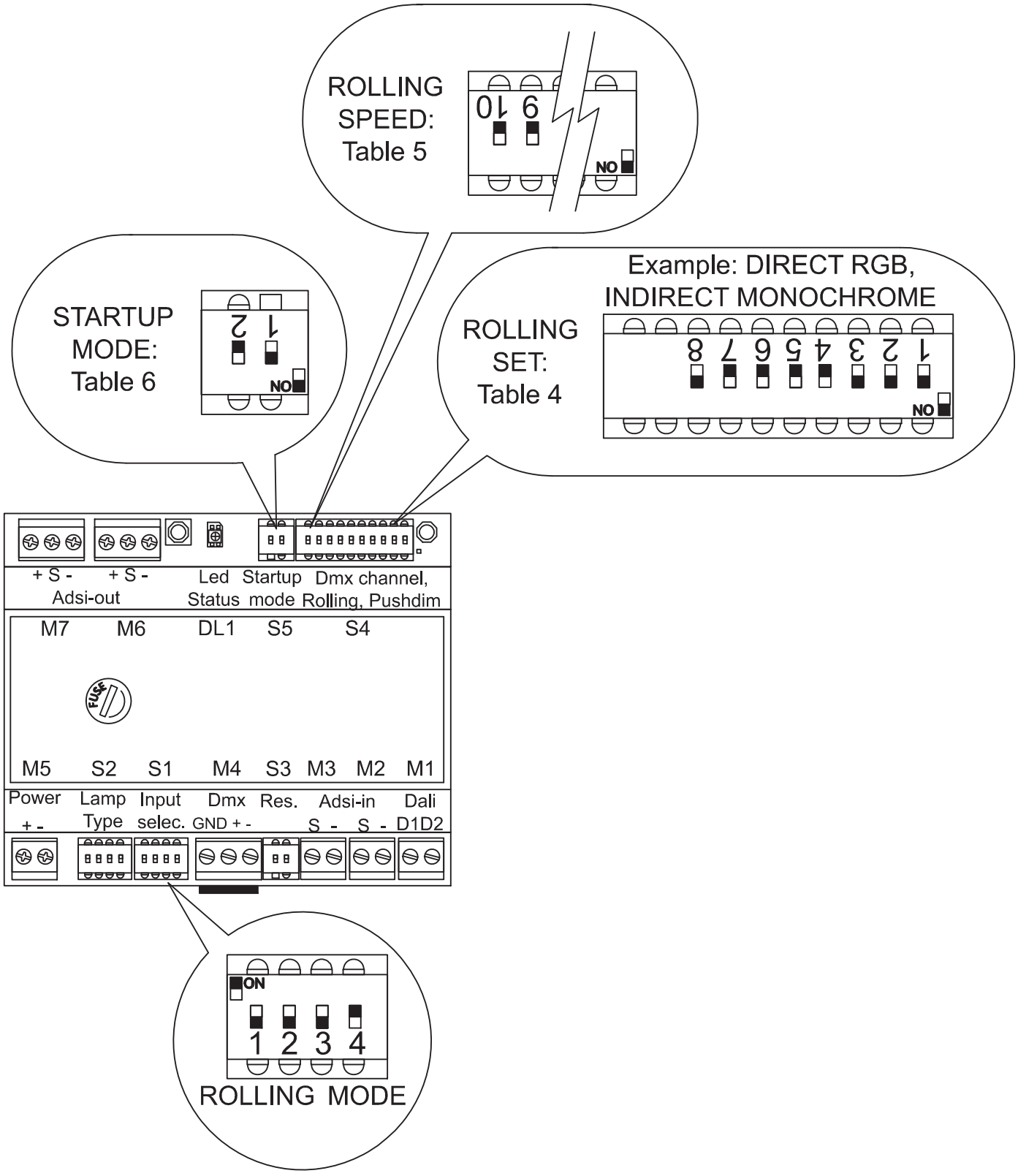


Fig. 9 : *Réglage des commutateurs DIP en mode « ROLLING »*

9.3 - FONCTION DU BOUTON POUSSOIR

Le bouton-poussoir « normalement ouvert » optionnellement relié aux bornes M3-M5 peut être utilisé pour :
- Allumer et éteindre le système au moyen d'une pression « longue ».
- Démarrer et arrêter le défilement à l'aide d'une pression « courte ».
- Veuillez noter qu'il n'est **PAS** possible de faire varier manuellement l'intensité du système à l'aide du poussoir.
- S'il est nécessaire de commander plusieurs NODO-MASTER avec le même bouton-poussoir, relier entre eux plusieurs NODO-MASTER en configuration maître-esclaves (voir Fig. 3 b et chapitre 8). Raccorder le bouton-poussoir normalement ouvert au NODO-MASTER « Maître ».

Exemples d'utilisation :
- **Démarrer le mode ROLLING à chaque mise en marche :**
  - Réglez « interrupteur mural » sur le commutateur DIP S5.
  - Activez manuellement le défilement au moyen d'une pression longue.
  - Puis coupez l'alimentation secteur au moyen d'un interrupteur mural ou d'une minuterie.
  - Lorsque l'interrupteur mural ou la minuterie seront réactivés, le défilement recommencera.

- **Activer la même scène fixe à chaque mise en marche :**
  - Réglez « interrupteur mural » sur le commutateur DIP S5.
  - Activez manuellement le défilement au moyen d'une pression longue.
  - Attendez que le système atteigne la scène désirée.
  - Arrêtez le défilement au moyen d'une brève pression.
  - Coupez l'alimentation secteur au moyen d'un interrupteur mural ou d'une minuterie.
  - Lorsque l'interrupteur mural ou la minuterie seront réactivés, la scène sauvegardée sera restaurée.

10 – RÉGLAGE DU NODO-MASTER EN MODE « PUSHDIM »

10.0 - INTRODUCTION

Le mode « PUSHDIM » peut être utilisé dans des installations simples pour piloter des modules MONOCHROMES sans nécessiter un environnement DALI ou DMX externe.

Dans ce mode de fonctionnement, il est possible au moyen d'un bouton-poussoir :
- D'allumer et d'éteindre le système.
- De faire varier manuellement l'intensité des modules monochromes.

Dans ce mode, le NODO-MASTER génère par lui-même une séquence de commandes nécessaire pour mettre en marche, arrêter et faire varier les luminaires à émission monochrome. Le mode PUSHDIM ne peut être activé que sur les modules monochromes connectés au canal 4 (monochrome direct) ou 8 (monochrome indirect).

10.1 - CONNEXIONS

Utilisez les câbles comme indiqué au paragraphe 5. Reportez-vous aux fig. 3a et 3b.
Branchez le bouton-poussoir aux bornes M3-M5.
NB : utilisez un bouton-poussoir « normalement ouvert » pour court-circuiter les '+' sur les bornes M3 et M5.
Branchez l'unité d'alimentation à la borne M5 en respectant la polarité.
Branchez à la borne M6 le câble allant vers les luminaires, en respectant la polarité.
En cas d'agencement « Maître-Esclave », connectez les bornes '-' et 'S' sur le M7 du NODO-MASTER DMX « Maître » aux bornes '-' et 'S' sur le M2 du NODO-MASTER « Esclave », en respectant la polarité, fig. 3b.

10.2 - RÉGLAGE DES COMMUTATEURS DIP POUR LE MODE PUSHDIM

Veuillez vous référer à la fig. 10.

Pour régler en mode PUSHDIM, localisez les commutateurs DIP S1 et réglez-les comme suit sur chaque NODO-MASTER autonome ou « Maître » (ne réglez **PAS** S1 sur un NODO-MASTER « Esclave ») :
S1-1 : OFF
S1-2 : OFF
S1-3 : OFF
S1-4 : ON.

NB : dans ce mode, seules sont reproduites les synchronisations entre NODO-MASTER « Maître » et NODO-MASTER « Esclave ».

Réglez les commutateurs DIP S4 de manière à activer le mode PUSHDIM, voir le tableau 7.

	Commutateurs DIP S4							
	S4-8	**S4-7**	**S4-6**	**S4-5**	**S4-4**	**S4-3**	**S4-2**	**S4-1**
	Indirect Monochr.	Indirect Bleu	Indirect Vert	Indirect Rouge	Direct Monochr.	Direct Bleu	Direct Vert	Direct Rouge
PUSHDIM	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

Tableau 7 : *Réglages des commutateurs DIP S4 en mode PUSHDIM*

Les commutateurs DIP en rapport avec la vitesse de défilement (S4-9 et S4-10) n'ont aucune signification dans ce mode.

Pour mettre en mode SWITCH-ON (voir également 10.3 ci-dessous) : localisez le commutateur DIP S5 et réglez-le comme décrit dans le tableau 8.

Mode SWITCH-ON	**Commutateurs DIP S5**	
	S5-1	**S5-2**
Sécurité : après rétablissement de l'alimentation électrique suite à une panne du réseau, le système reste éteint	OFF	OFF
Interrupteur mural : après rétablissement de l'alimentation électrique suite à une panne du réseau, le système restaure la dernière scène sauvegardée	ON	OFF

Tableau 8 : *Réglage des commutateurs DIP S5 en mode PUSHDIM pour choisir le mode SWITCH-ON après rétablissement de l'alimentation électrique suite à une panne du réseau.*

NB : veuillez noter que le sens de ces modes est :
- **Sécurité : pour que le système reste éteint pour plus de sureté après rétablissement de l'alimentation électrique suite à une panne du réseau,**
- **Interrupteur mural : pour être en mesure d'activer et de désactiver le système au moyen d'un interrupteur mural ou d'une minuterie. La dernière scène sauvegardée sera restaurée lors de la réactivation de l'interrupteur mural ou de la minuterie.**

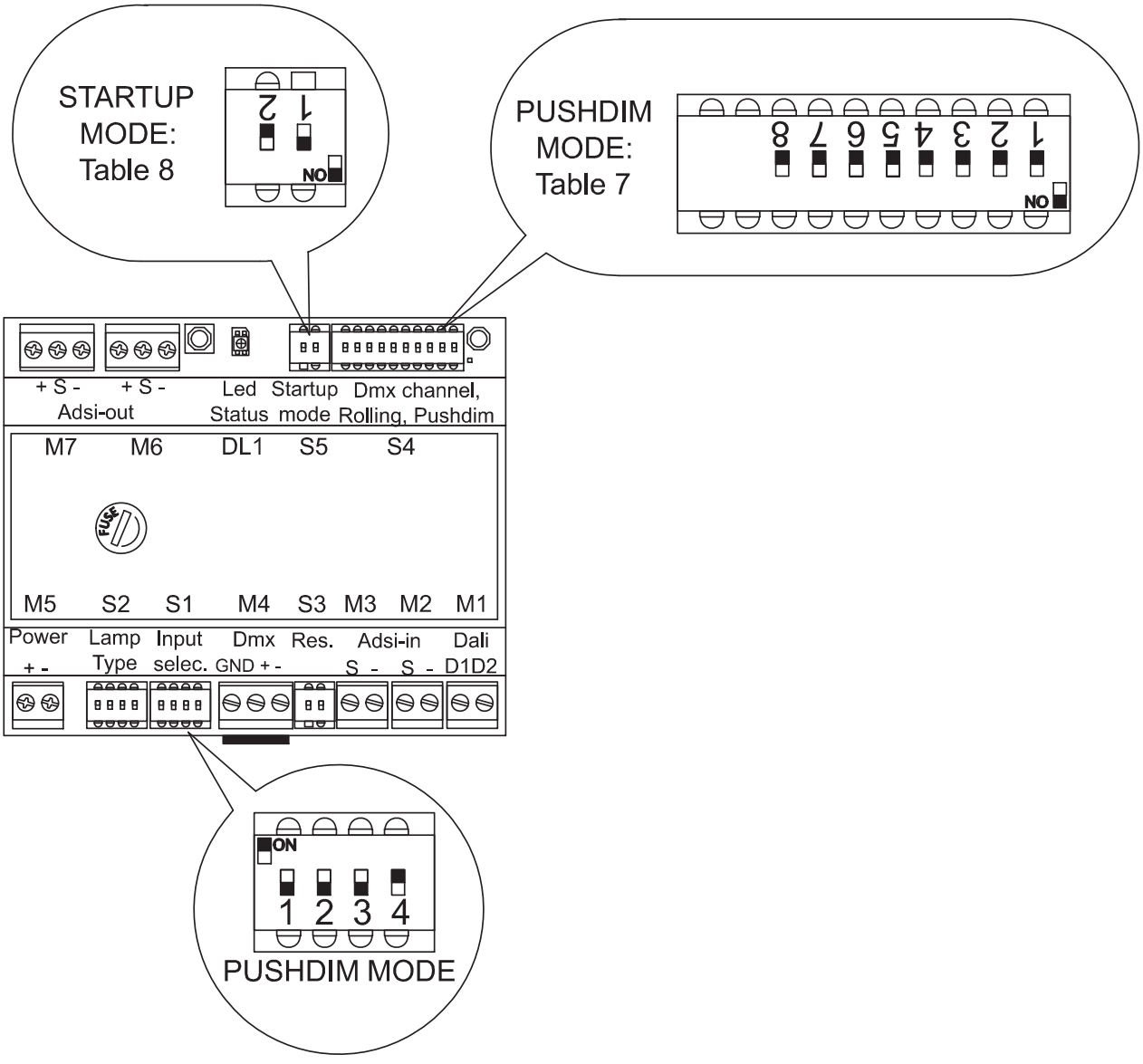


Fig. 10 : *Réglages des commutateurs DIP en mode « PUSHDIM »*

10.3 - FONCTION DU BOUTON POUSSOIR

Le bouton-poussoir « normalement ouvert » optionnellement relié aux bornes M3-M5 peut être utilisé pour :
- Allumer et éteindre le système au moyen d'une pression « courte ».
- Faire varier l'intensité du système au moyen d'une pression « longue ». L'intensité du système varie jusqu'à ce que le bouton soit pressé.
- Lorsque le niveau maximum ou minimum est atteint, la variation s'arrête ; il faudra relâcher le bouton-poussoir et le presser à nouveau pour relancer le processus de variation d'intensité dans le sens inverse.
- Chaque fois que le bouton-poussoir est relâché et qu'on le presse à nouveau, la pente de variation s'inverse (c.-à-d. que si l'intensité augmentait avant qu'on pousse et relâche le bouton, elle diminuera après la prochaine pression).
- S'il est nécessaire de commander plusieurs NODO-MASTER avec le même bouton-poussoir, relier entre eux plusieurs NODO-MASTER en configuration maître-esclaves (voir Fig. 3 b et chapitre 8). Raccorder le bouton-poussoir normalement ouvert au NODO-MASTER « Maître ».

Exemples d'utilisation :
- **Activer la même intensité fixe à chaque mise en marche :**
  - Réglez « interrupteur mural » sur le commutateur DIP S5.
  - Choisissez l'intensité désirée au moyen d'une pression longue.
  - Coupez l'alimentation secteur au moyen d'un interrupteur mural ou d'une minuterie.
  - Lorsque l'interrupteur mural ou la minuterie sera réactivé, la scène sauvegardée sera restaurée.

11 – TEST DU SYSTÈME, MESSAGES D'ERREUR

Après la mise sous tension, les situations suivantes peuvent se produire :

a) Chaque section fonctionne bien, les synchronisations prévues (le cas échéant) par l'agencement maître-esclave sont respectées, les couleurs s'affichent dans le bon ordre.

b) Les luminaires RGB (ou certains d'entre eux) restent constamment allumés à l'intensité maximale (la lumière résultante étant donc blanche), l'intensité des luminaires MONOCHROME (ou certains d'entre eux) varie de minimum à maximum puis reste constamment à l'intensité maximale : cette situation signifie que la connexion 'S' entre le NODO-MASTER et la section n'est pas bien faite (interruption, faux contacts...).

c) La « LED d'état » sur le NODO-MASTER reste VERTE en permanence, mais la section est éteinte : cette situation signifie que la connexion '+' et '-' entre le NODO-MASTER et la section n'est pas bien faite (interruption, faux contacts, polarité inversée, fusible brûlé...).

d) La « LED d'état » sur le NODO-MASTER est éteinte et la section est éteinte : cette situation signifie que la connexion '+' et '-' entre le bloc d'alimentation et le NODO-MASTER n'est pas bien faite (interruption, faux contacts, polarité inversée). Vérifiez s'il y a du 48 VCC correctement polarisé sur le M5, si oui le NODO-MASTER ainsi que le fusible sont en panne.

e) La « LED d'état » sur le NODO-MASTER est allumée, mais pas VERTE en permanence, vérifiez les situations suivantes :
- La LED reste ROUGE en permanence : Le NODO-MASTER est en panne ou il y a un court-circuit sur la sortie M6 (ou M7).
- La LED est ROUGE 1 seconde, VERTE 1 seconde : surcharge sur M6 (ou M7) (basse tension).
- La LED est ROUGE 2 secondes, VERTE 2 secondes : surtension sur M5.
- La LED est ROUGE 5 secondes, VERTE 5 secondes : température élevée sur le NODO-MASTER.

INHALTSVERZEICHNIS

1 – EINLEITUNG

Zweck des NODO-MASTER DALI oder NODO-MASTER DALI/DMX ist, eine DALI- oder DMX-Umgebung über eine ADSI (Artemide digital signal interface) Steuerung mit Artemide Leuchtkörpern zu verbinden.
Abgesehen von einem DALI oder DMX Bus ist es auch möglich, eine eingebaute Rollmodus-Maschine oder eine von einem Drucktaster betriebene Schnittstelle zu aktivieren.

Das wichtigste Merkmal des 3-adrigen ADSI-Bus ist, die Stromschiene (Versorgungsschiene) von den Steuerungsschienen (digitale BUS-Systeme) zu trennen. Im Rahmen der Grenzen des maximalen von der Stromversorgungseinheit abgegebenen Stroms und der Einschränkungen für den Querschnitt der Zuführungsdrähte können längere Abschnitte verwaltet werden, als mit anderen 4-adrigen Systemen. Dank des Einsatzes digitaler Steuerungen und einer besonderen Gestaltung des Stromkreises kann in allen Leuchtkörpern eines Abschnitts eine gleichmäßige Helligkeit gewährleistet werden, bei der es keinen Unterschied zwischen der Helligkeit des letzten Leuchtkörpers eines Abschnitts und dem ersten des nächsten Abschnitts gibt.

Ein weiteres interessantes Merkmal ist die Möglichkeit, im gleichen Abschnitt Leuchtkörper unterschiedlicher Technik und/oder Funktion einzusetzen: Direkt zerstreuende RBG, direkter monochromer Strom...

In komplexen Zusammenstellungen sind in jedem Bereich bis zu 8 unabhängige Kanäle verfügbar. Unabhängig von den im Katalog angebotenen Produkten folgen hier Beispiele einiger in einem Bereich möglicher Konfigurationen:
- Hängende Leuchtkörper, RGB (rot-grün-blau) mit direkter Streuung (Kanäle Nr. 1, 2, 3), indirekte weiße Emission (Kanal Nr. 8)
- Deckenleuchtkörper, RGB (rot-grün-blau) mit direkter Streuung (Kanäle Nr. 1, 2, 3), direkte blaue Emission (Kanal Nr. 4)
- In den Boden eingelassene Leuchtkörper mit direkter weißer Emissionsstreuung (Kanal Nr. 4), RGB Emissionsstreuung (Kanäle Nr. 1, 2, 3).

Jeder im ADSI-BUS verwendete Kanal entspricht einer Adresse im DALI- oder DMX-BUS.

NB: wenn NODO-MASTER DALI oder NODO-MASTER DALI/DMX-Geräte im DALI- oder DMX-Betrieb verwendet werden, können sie selbst keine ADSI-Befehle generieren. Das bedeutet, dass Befehle wie „ein“, „aus“, „dimmen“, „Abruf der Lichtszene“... von der DALI- oder DMX-Umgebung generiert werden müssen. Somit müssen die geeigneten Steuerungen für dieses BUS-Systemen vorgesehen werden.

NODO-MASTER DALI oder NODO-MASTER DALI/DMX-Geräte können selbst nur in den Betriebsarten ROLLING oder PUSHDIM ADSI-Befehle generieren, s. Abb. 9 und 10.

Nachstehend wird der Begriff „NODO-MASTER“ sowohl für „NODO-MASTER DALI“ und „NODO-MASTER DALI/DMX“ verwendet. Sollte eine Funktion nur in einer Vorrichtung vorhanden sein, wird diese angegeben:
- NODO-MASTER DALI: i.e. NODO-MASTER DALI oder NODO-MASTER DALI/DMX im DALI-Betrieb
- NODO-MASTER DMX: i.e. NODO-MASTER DALI/DMX im DMX-Betrieb.

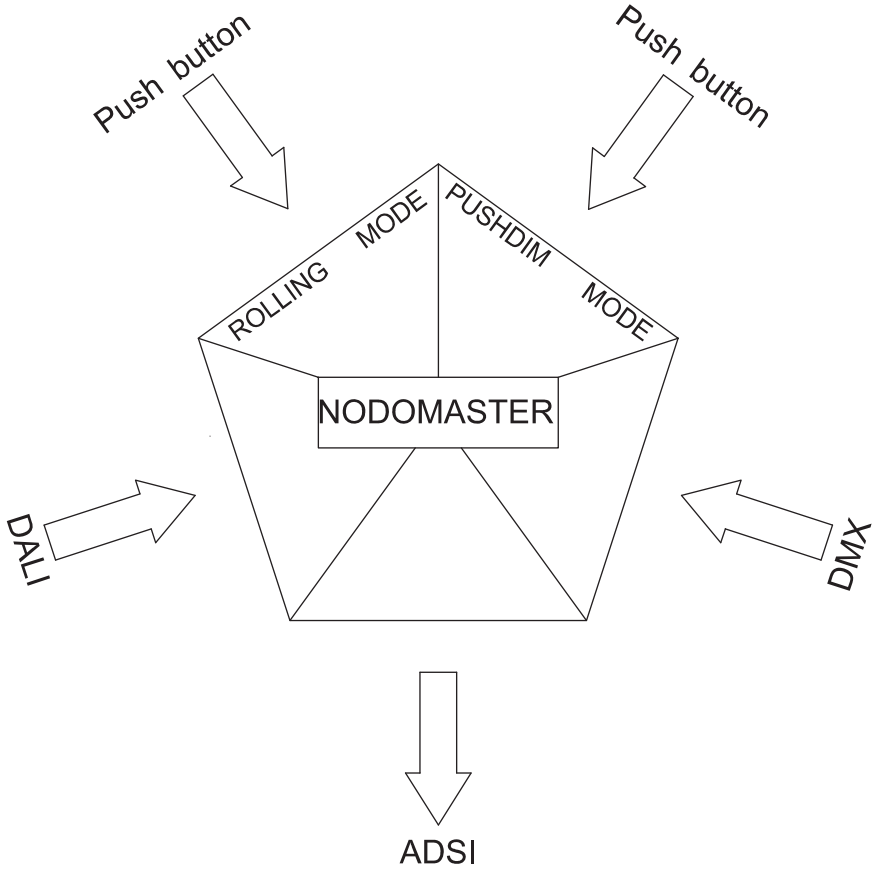


Abb. 1: *Zusammenwirken des Nodo-Master*

2 – ANORDNUNG DER LEUCHTKÖRPER, ZU BEACHTENDE EINSCHRÄNKUNGEN

Nachstehend folgen einige typische Anordnungen für den Anschluss von ADSI-Leuchtkörpern an einen NODO-MASTER.

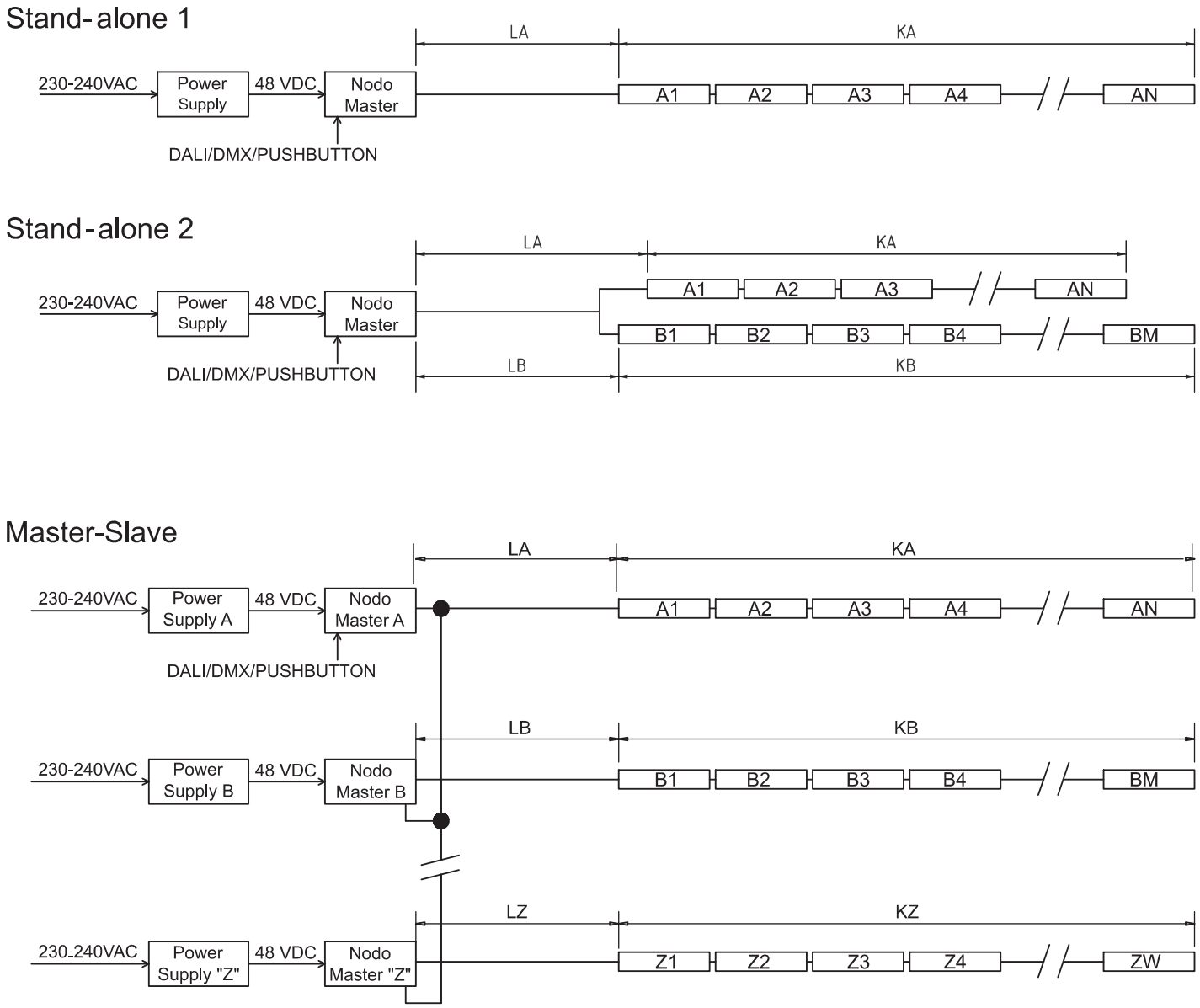


Abb. 2: *Typische Anordnungen*

- Anordnung „Stand-alone 1“: Stromversorgungseinheit, NODO-MASTER: das ist die einfachste Anordnung, die Stromversorgungseinheit und der NODO-MASTER versorgen nur einen Abschnitt mit Leuchtkörpern.
- Anordnung „Stand-alone 2“: Stromversorgungseinheit, NODO-MASTER zwei Abschnitte mit Leuchtkörpern: diese Anordnung kommt beispielsweise dann zum Einsatz, wenn der NODO-MASTER in der Mitte eines Abschnitts liegt.
- „Master-Slave“ Anordnung: Stromversorgung 1, NODO-MASTER 1 für Abschnitt1; Stromversorgung 2, NODO-MASTER 2 für Abschnitt 2...: bei extrem langen Abschnitten (über die Grenze NODO-MASTER hinaus) können die einzelnen Abschnitte mit einander synchronisiert werden. NODO-MASTER1 ist „Master“ (der einzige, der von der DALI/DMX-Umgebung erkannt wird und somit auf dem BUS Adressen belegt), alle anderen sind als „Slave“ eingestellt (und belegen keine Adressen im DALI/DMX-BUS).

- Maximale Stromstärke: im Allgemeinen wird die maximale Stromstärke in einem Abschnitt auf 90 % der Stromversorgungseinheit festgelegt, die den NODO-MASTER und den Abschnitt versorgt. Den empfohlenen Gerätestrom entnehmen Sie bitte Tabelle 1.

- In einem Abschnitt können maximal 25 Leuchtkörper mit einem NODO-MASTER verbunden werden. Im „Master“-Bereich einer „Master Slave“ Anordnung muss die Anzahl „Slave“ NODO-MASTER in den 25 Leuchtkörpern enthalten sein. Wenn beispielsweise 3 „Slave“ NODO-MASTER mit dem Master verbunden sind, ist die Anzahl Leuchtkörper im Master-Abschnitt auf 25-3=22 begrenzt. Einschränkungen entnehmen Sie bitte Tabelle 1.

- Maximale Länge eines mit einem NODO-MASTER verbundenen Abschnitts: vorausgesetzt, dass alle Leuchtkörper an einander anschließen und kein Zwischenraum zwischen ihnen vorhanden ist und L der Kabellänge zwischen dem NODO-MASTER und dem 1. Leuchtkörper des Abschnittes entspricht (bei Stand-alone 2, L=LA+LB) und K der Gesamtlänge der Module entspricht (bei Stand-alone 2, K=KA+KB), ist nachstehender Tabelle 1 zu entnehmen, wie K bestimmt wird.

- Längenbegrenzungen der Abschnitte, die maximale Anzahl Leuchtkörper im gleichen Abschnitt, die maximale Stromstärke sind von den elektrischen Eigenschaften der Leuchtkörper im Abschnitt und dem für die Kabeldurchführung verwendeten Kabelquerschnitt im Bereich abhängig. Siehe auch Einschränkungen aus dem Artemide-Katalog.

Installations-art	Modulart	Länge der Module (m)	Querschnitt des Stromkabels (mm^2)	L (Länge des Stromkabels) (m)	K max (Gesamtlänge der Module) (m)	N. max (Gesamtanzahl der Module)	Leistung des Betriebsgeräts (W)
Bodenl.	RGB	0.6	0.75	5	**12**	20	240
				10	**8.4**	14	
				15	**6.6**	11	
		0.9	0.75	5	**10.8**	12	240
				10	**9**	10	
				15	**7.2**	8	
			1.5	15	**10.8**	12	
			2.5	15	**12.6**	14	320
		1.2	1.5	5	**14.4**	12	320
				10	**12**	10	
				15	**10.8**	9	
			2.5	5	**14.4**	12	320
				10	**13.2**	11	
				15	**12**	10	
	Weiss	0.6	0.75	15	**12**	20	100
		0.9	0.75	15	**9.9**	11	100
				5	**18**	20	240
				10	**16.2**	18	
				15	**13.5**	15	
		1.2	0.75	5	**20.4**	17	240
				10	**16.8**	14	
				15	**13.2**	11	
			1.5	15	**18**	15	
Pendell. Deckenl. Einbaul.	RGB	1.2	2.5	10	**15.6**	13	320
				15	**14.4**	12	
		2.4	2.5	10	**14.4**	6	320
				15	**12**	5	
	Weiss	1.2	2.5	20	**9.6**	8	320
				30	**7.2**	6	240
		2.4	2.5	20	**9.6**	4	320

Tabelle 1: *Einschränkungen der Anordnung*

- Für jede der oben erwähnten Anordnungen den Abb. 3a und 3b die Verbindungen am NODO-MASTER entnehmen.

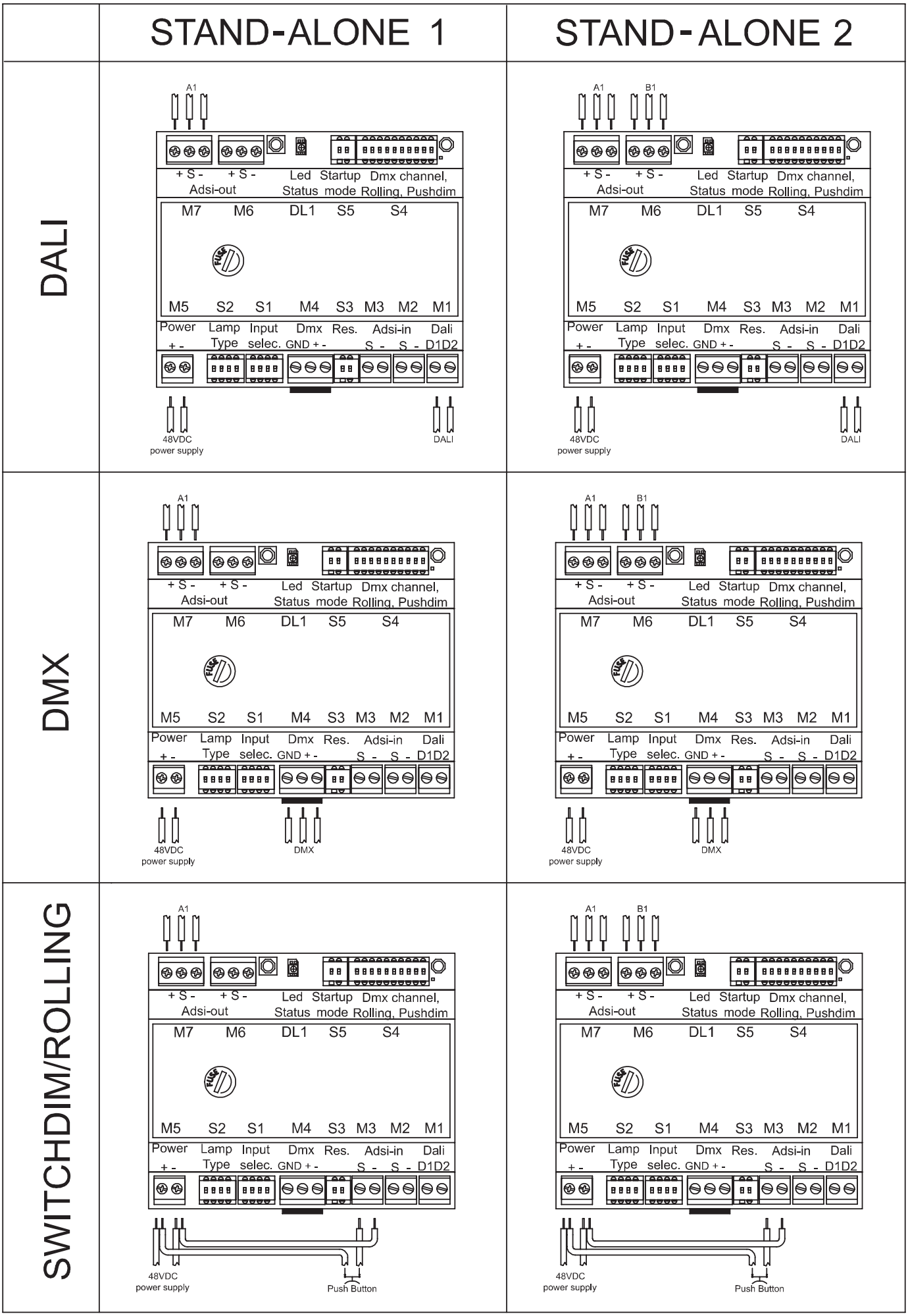


Abb. 3a: *Verbindungen des Nodo-Master in Betriebsart „Stand-alone 1“ und „Stand-alone 2“*
(Einstellungen der Kippschaltern s. auch 6.2, 7.2, 8.2, 9.2 und 10.2)

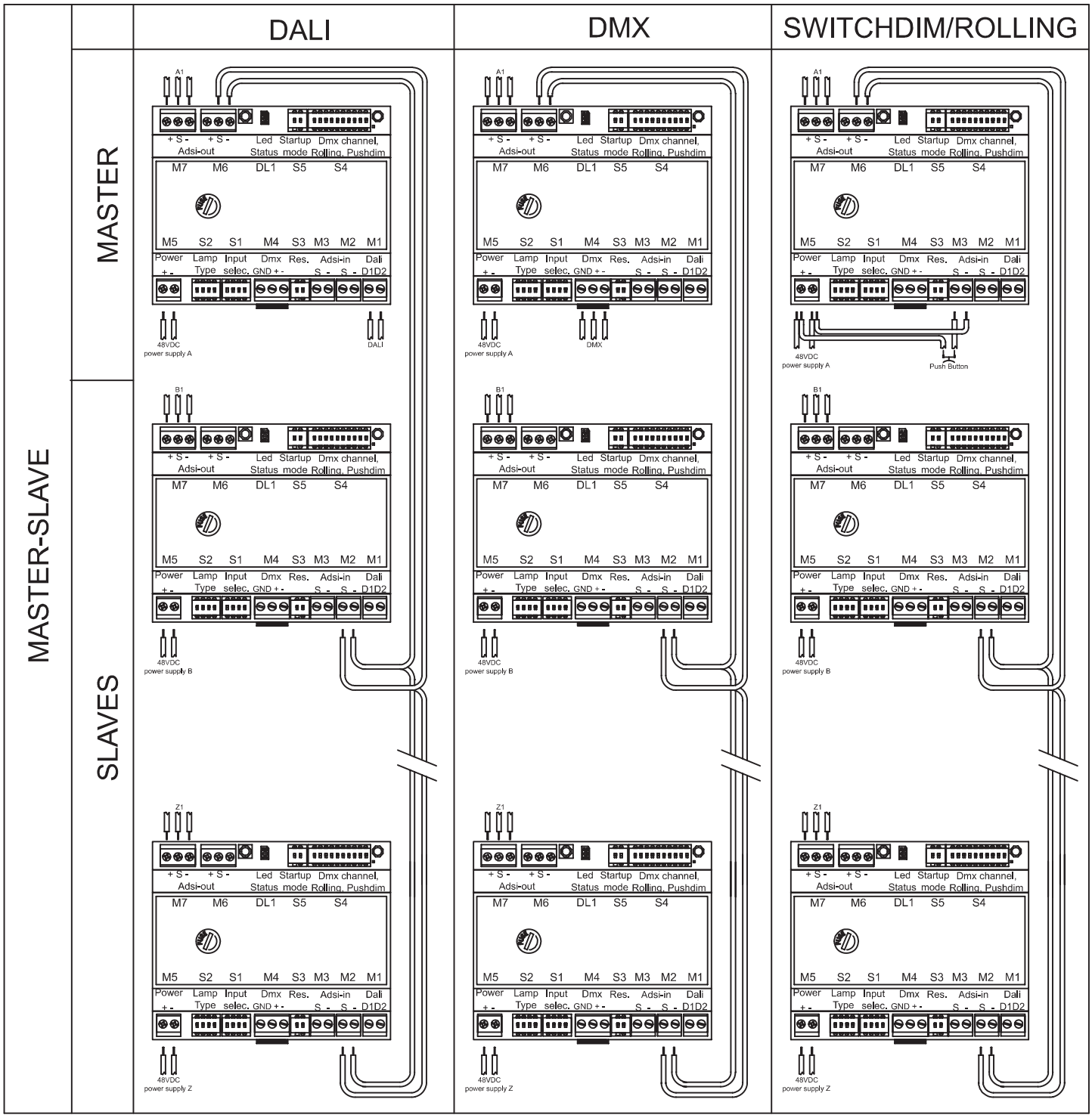


Abb. 3b: *Verbindungen des Nodo-Master in Betriebsart „Master Slave“*
(Einstellungen der Kippschaltern s. auch 6.2, 7.2, 8.2, 9.2 und 10.2)

3 – SICHERUNGEN

Zum Schutz der Versorgungsleitung für die Leuchtkörper befindet sich an der Vorderseite des NODO-MASTER eine 10A (T10) Ø5 x 20 mm Verzögerungssicherung.

4 – STROMVERSORGUNG

Im Rahmen der Umweltvorgaben und Einschränkungen für die Stromversorgung des Abschnitts sollten die von Artemide im Katalog empfohlenen Dauerversorgungsspannungen verwendet werden (V_{OUT} = 48 VDC, max 480 W).

NB: Artemide übernimmt keinerlei Haftung, wenn die verwendete Stromversorgung von Artemide nicht zertifiziert ist.

5 – KABELEIGENSCHAFTEN

S. Abb. 4.

Von der Stromversorgung zum NODO-MASTER (M5 Klemmleiste): mit dem Installationsumfeld kompatible Leitungen verwenden. Diese Verbindung sollte so kurz wie möglich ausfallen, mindestens 2 x 2,5 mm² verwenden. So vorhanden sollten bereits in die Stromversorgung eingebaute Kabel verwendet werden.

Vom NODO-MASTER (Klemmleisten M6 und M7) zum 1. Leuchtkörper des Abschnittes: ggf. den im Katalog vorgesehenen Code (z. B. Algoritmo in Boden eingelassen, 3 x 0,75 mm²) verwenden.
Ansonsten ein 3-poliges, mit der Anlage kompatibles Kabel verwenden. Diese Kabelverbindung muss so kurz wie möglich ausfallen, es wird ein Kabelquerschnitt von mindestens 3 x 1,5 mm² (vorzugsweise 3 x 2,5 mm²) empfohlen. Die auf dem Kabel und den Klemmleisten angegebene Polarität „+“, „-“, „S“ einhalten.

Von DALI Bus zum NODO-MASTER (Klemmleiste M1): maximalen Abstand zwischen der Dali-Steuerungseinheit (z. B. Touch Panel, Gruppen-Steuergerät, Szenen-Steuergerät, ...) und dem am weitesten entfernt liegenden Aktor einschließlich NODO-MASTER berechnen: Leitungsquerschnitte über 0,5 mm² für Entfernungen bis zu 100 m, über 0,75 mm² für Entfernungen bis 150 m und über 1,5 mm² für größere Abstände verwenden. Die maximale Entfernungen beträgt 300 m. DALI Bus ist nicht gepolt.

Von DMX Bus zum NODO-MASTER (Klemmleiste M4, nur für NODO-MASTER DMX): ein Kabel mit verdrillten Adernpaaren, z. B. CAT5-Kabel verwenden. Die Verbindung wie in einer der beiden schematischen Darstellungen in Abb. 5 herstellen. Polarität „GND“, „+“, „-“ einhalten.

Verbindungen für die Anordnung „Master-Slave“ zwischen Klemmleisten M2 und M6: mindestens 2 x 0,5 mm² verwenden, „-“ und „S“-Pole mit M6 oder M7 „Master“ des NODO MASTER mit den gleichen Polen auf M2 oder M3 des „Slave“ NODO MASTER unter Beibehaltung der Polarität verbinden.

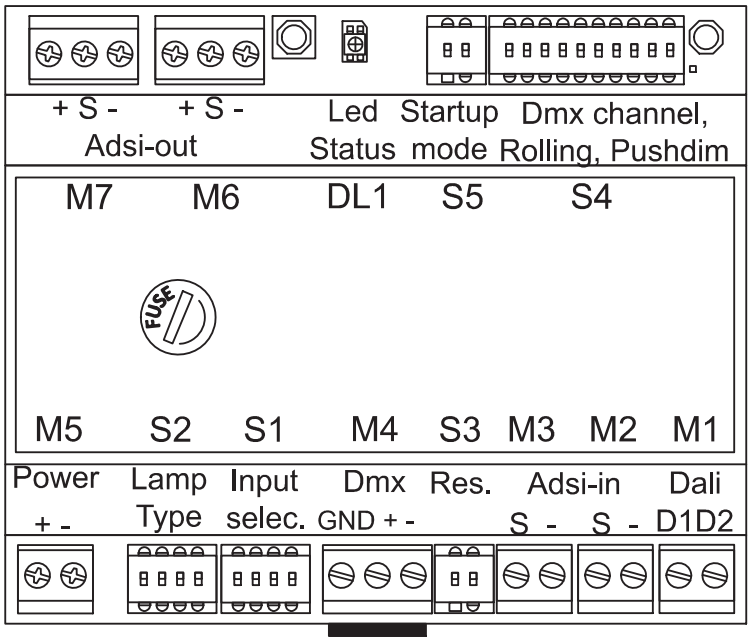


Abb. 4: *Anordnung der Klemmleiste des Nodo-Master*
(Einstellungen der Kippschaltern s. auch 6.2, 7.2, 8.2, 9.2 und 10.2)

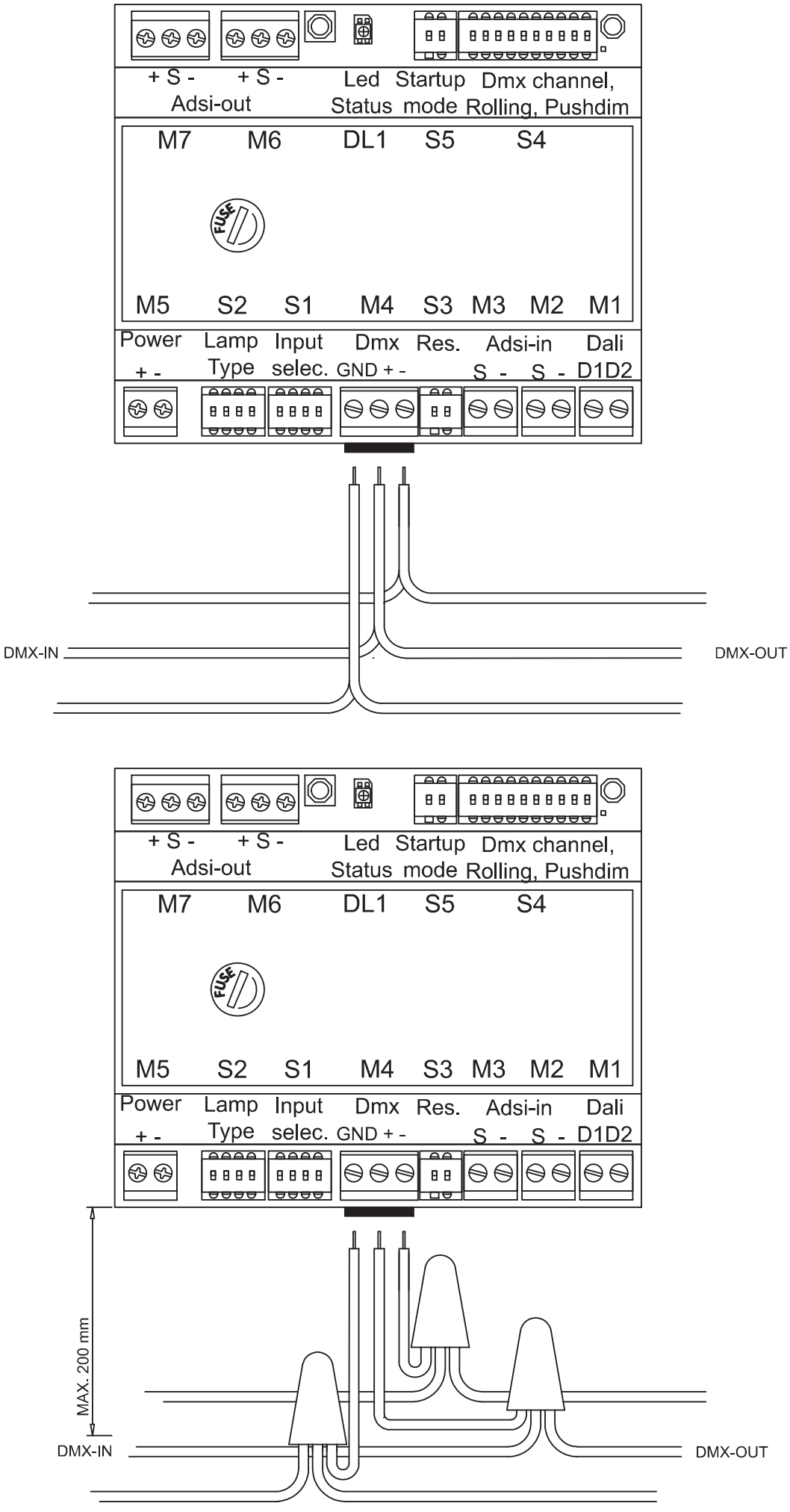


Abb. 5: *Verbindungen des DMX-Bus*

6 – EINSTELLUNG NODO-MASTER IN „DALI“-BETRIEB

6-1 - VERBINDUNGEN

Kabel wie in Abschnitt 5 gezeigt verwenden. S. Abb. 3a und 3b.
Kabel vom DALI Bus mit Klemmleiste M1 verbinden.
Stromkabel von der Stromversorgung mit der Klemmleiste M5 unter Beachtung der Polarität verbinden.
Stromkabel zu den Leuchtkörpern mit der Klemmleiste M6 unter Beachtung der Polarität verbinden.
Bei einer „Master-Slave“-Anordnung „-“ und „S“ von M7 des „Master“ NODO-MASTER DALI mit „-“ und „S“ auf M2 des „Slave“ NODO-MASTER unter Beachtung der Polarität verbinden. Abb. 3b.

6.2 - EINSTELLUNGEN DER KIPPSCHALTER FÜR DALI-BETRIEB

S. Abb. 6.

Zur Einstellung des Bus-Typs die S1 Kippschalter ermitteln. Einstellung des DALI-Bus:
S1-1: OFF
S1-2: ON
S1-3: OFF
S1-4: OFF

Zur Einstellung der reservierten Adressennummern auf dem Bus die S2 Kippschalter ermitteln:
- Wenn in der Einstellung nur direkte RGB Leuchtkörper in dem mit dem NODO-MASTER verbundenen Abschnitt vorhanden sind, belegt NODO-MASTER DALI 3 Adressen. S2 Kippschalter folgendermaßen einstellen:
  S2-1: ON
  S2-2: OFF
  S2-3: OFF
  S2-4: OFF

- Wenn in der Einstellung nur direkte monochrome Leuchtkörper (nur weiß, nur rot, nur grün, nur blau, nur bernsteinfarben) in dem mit dem NODO-MASTER verbundenen Abschnitt vorhanden sind, belegt NODO-MASTER DALI 1 Adresse. S2 Kippschalter folgendermaßen einstellen:
  S2-1: OFF
  S2-2: ON
  S2-3: OFF
  S2-4: OFF

- Wenn in der Einstellung RGB und/oder monochrome und/oder Leuchtkörper unterschiedlicher Art (direkt und indirekt) in dem mit dem NODO-MASTER verbundenen Abschnitt vorhanden sind, 2 Kippschalter für tatsächliche Gegebenheit einstellen, der NODO-MASTER DALI belegt gemäß beiliegender Tabelle 2 N Adressen (in der EIN = Leuchtkörper vorhanden, OFF = Leuchtkörper NICHT vorhanden):

Insgesamt belegte Adressen	S2-1 (DIREKT RGB)	S2-2 (DIREKT MONOCHROM)	S2-3 (INDIREKT RGB)	S2-4 (INDIREKT MONOCHROM)
1	OFF	ON	OFF	OFF
1	OFF	OFF	OFF	ON
2	OFF	ON	OFF	ON
3	ON	OFF	OFF	OFF
3	OFF	OFF	ON	OFF
4	ON	ON	OFF	OFF
4	OFF	OFF	ON	ON
4	ON	OFF	OFF	ON
4	OFF	ON	ON	OFF
6	ON	OFF	ON	OFF
7	ON	ON	ON	OFF
7	ON	OFF	ON	ON
8	ON	ON	ON	ON

Tabelle 2: E*instellungen der Kippschaltern S2*

NB: Aufgrund der begrenzten Anzahl der von dem DALI-Protokoll verwalteten Adressen (64) wird empfohlen, immer die mit den Anforderungen an die Anordnung kompatible Mindestadressenanzahl anzugeben.

S3 und S4 sind im NODO-MASTER DALI-Modus bedeutungslos.

6.3 - KOMPLEXE ANLAGEN UND ADRESSVERWALTUNG

Es wird von zwei Abschnitten, die jeweils mit einem NODO-MASTER DALI verbunden sind und von der Notwendigkeit ausgegangen, die Farben beider Abschnitte zu synchronisieren. Bei großem Abstand zu den Abschnitten ist es schwierig, eine „Master-Slave" Anordnung zu verwenden und die DALI-Adressen müssen gemäß DALI-Standard über „Gruppen-Steuergeräte" in Gruppen (max. 16) zusammengefasst werden.

In dem einfachen Fall mit nur RGB-Leuchtkörpern könnte Folgendes vorliegen (die Adressennummer kann nur mit DALI-PC-Schnittstelle oder auf einigen DALI Bedienungsfeldern angezeigt werden):

NODO-MASTER DALI N. 1:
R = Adresse Nr. 1
G = Adresse Nr. 2
B = Adresse Nr. 3

NODO-MASTER DALI N. 2:
R = Adresse Nr. 4
G = Adresse Nr. 5
B = Adresse Nr. 6

Unter Befolgung des spezifischen Gruppensteuerungsverfahrens (oder über das Bedienungsfeld) jede Adresse zu der richtigen DALI-Gruppe hinzufügen:
Gruppe 1 (ROT): Adresse Nr. 1, Adresse Nr. 4
Gruppe 2 (GRÜN): Adresse Nr. 2, Adresse Nr. 5
Gruppe 3 (BLAU): Adresse Nr. 3, Adresse Nr. 6

Die 3 Gruppen werden anhand von „Szenen-Steuergeräten" laut DALI-Norm über Lichtszenen (max. 16) verwaltet. Aus „Sequenzen" können mehrere Lichtszenen aufgerufen werden, wenn das von dem verwendeten DALI Bedienungsfeld vorgesehen ist.

Aufgrund der Tatsache, dass das DALI-Protokoll den auf dem Bus ermittelten Geräten (einschließlich NODO-MASTER) Adressen in zufälliger Reihenfolge zuweist, kann es vorkommen, dass die einem NODO-MASTER zugewiesenen Adressen nicht auf einander folgen und/oder nicht in der gewünschten Reihenfolge erscheinen.

In einem derartigen Fall können wir mit dem gleichen Beispiel wie vorstehend konfrontiert werden:

NODO-MASTER DALI N. 1:
R = Adresse Nr. 6
G = Adresse Nr. 2
B = Adresse Nr. 3

NODO-MASTER DALI N. 2:
R = Adresse Nr. 1
G = Adresse Nr. 4
B = Adresse Nr. 5

In diesem Fall sind folgende DALI Adressen zu DALI-Gruppen hinzuzufügen:
Gruppe 1 (ROT): Adresse Nr. 6, Adresse Nr. 1
Gruppe 2 (GRÜN): Adresse Nr. 2, Adresse Nr. 4
Gruppe 3 (BLAU): Adresse Nr. 3, Adresse Nr. 5

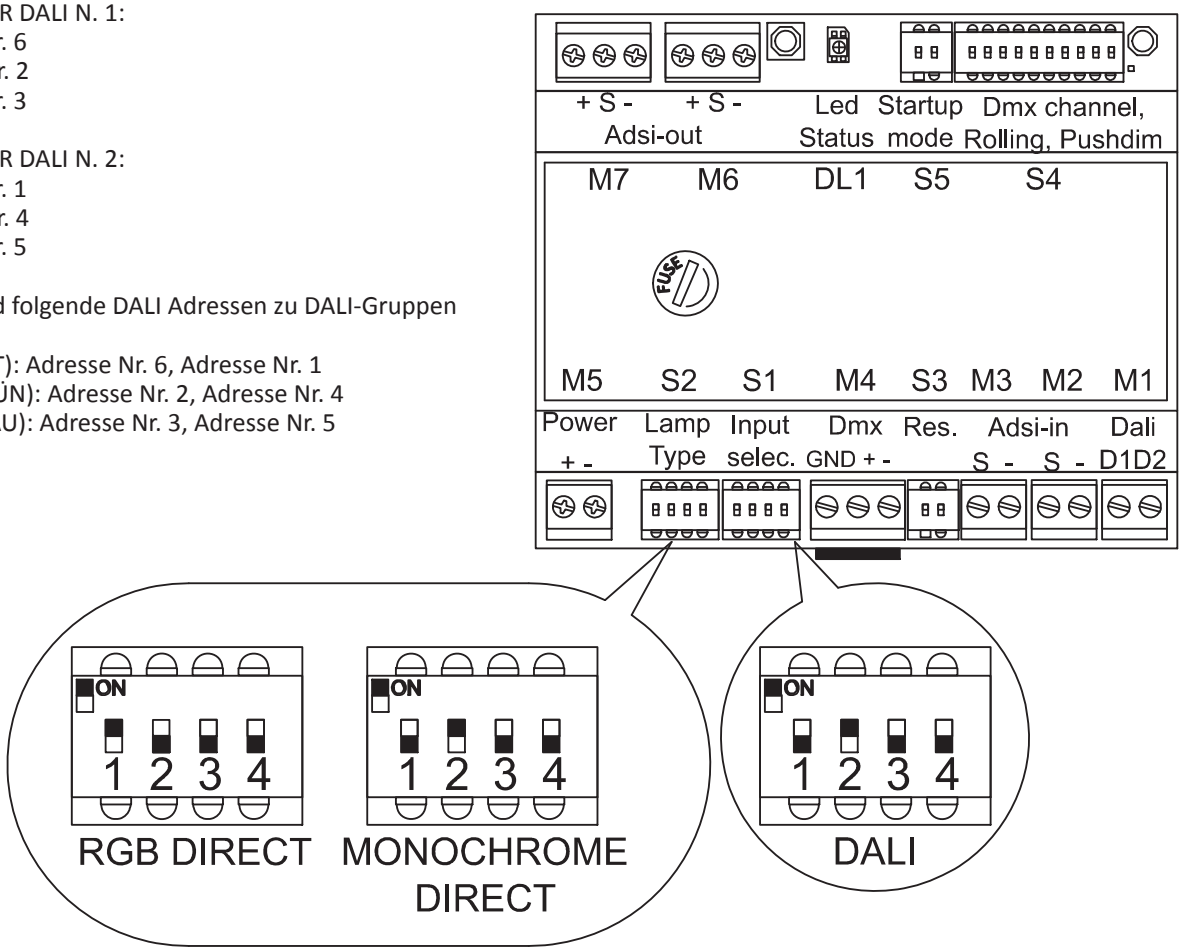


Abb. 6: *Einstellung der Kippschaltern S2 in Betriebsart „Dali"*
Für weitere Kombinationen von Leuchtkörpern s. auch Tabelle 2 in Kapitel 6.2

7 – EINSTELLUNG NODO-MASTER IN „DMX“-BETRIEB

7-1 - VERBINDUNGEN

Kabel wie in Abschnitt 5 gezeigt verwenden. S. Abb. 3a und 3b.
Stromkabel vom DMX-BUS zur Klemmleiste M4 unter Beachtung der Polarität verbinden. Eine der beiden in Abb. 5 gezeigten Verbindungsarten verwenden.
Stromkabel von der Stromversorgung mit der Klemmleiste M5 unter Beachtung der Polarität verbinden.
Stromkabel zu den Leuchtkörpern mit der Klemmleiste M6 unter Beachtung der Polarität verbinden.
Bei einer „Master-Slave“-Anordnung „-“ und „S“ von M7 des „Master“ NODO-MASTER DMX mit „-“ und „S“ auf M2 des „Slave“ NODO-MASTER unter Beachtung der Polarität verbinden. Abb. 3b.

7.2 - EINSTELLUNGEN DER KIPPSCHALTER FÜR DMX-BETRIEB

S. Abb. 7.

Zur Einstellung des Bus-Typs die S1 Kippschalter ermitteln. Einstellung des DMX-Bus:
S1-1: ON
S1-2: OFF
S1-3: OFF
S1-4: OFF

Zur Einstellung der reservierten Adressennummern auf dem Bus die S2 Kippschalter ermitteln:
- Wenn in der Einstellung nur direkte RGB Leuchtkörper in dem mit dem NODO-MASTER verbundenen Abschnitt vorhanden sind, belegt NODO-MASTER DMX 3 Adressen. S2 Kippschalter folgendermaßen einstellen:
  S2-1: ON
  S2-2: OFF
  S2-3: OFF
  S2-4: OFF.

- Wenn in der Einstellung nur direkte monochrome Leuchtkörper (nur weiß, nur rot, nur grün, nur blau, nur bernsteinfarben) in dem mit dem NODO-MASTER verbundenen Abschnitt vorhanden sind, belegt NODO-MASTER DMX 1 Adresse. S2 Kippschalter folgendermaßen einstellen:
  S2-1: OFF
  S2-2: ON
  S2-3: OFF
  S2-4: OFF.

- Wenn in der Einstellung RGB und/oder monochrome und/oder Leuchtkörper unterschiedlicher Art (direkt und indirekt) in dem mit dem NODO-MASTER verbundenen Abschnitt vorhanden sind, 2 Kippschalter für tatsächliche Gegebenheit einstellen, der NODO-MASTER DMX belegt gemäß beiliegender Tabelle 2 N Adressen (in der EIN = Leuchtkörper vorhanden, OFF = Leuchtkörper NICHT vorhanden).

Zur Aktivierung des internen DMX-Endwiderstandes die S3 Kippschalter ermitteln.
Gemäß DMX-Norm muss das letzte an einen DMX-Bus angeschlossene Gerät zwischen „+“ und „-“ über 120 Ω Widerstand verfügen. Dieser Widerstand kann intern auf einem NODO-MASTER DMX durch Einstellung von S3-1 auf ON aktiviert werden.

Zur Einstellung der DMX-Adresse die S4 Kippschalter ermitteln.
Auf einem DMX-Bus muss jedes Gerät über eine einmalige Adresse zwischen 1 und 511 verfügen.
Anhand der Nummer der Adresse eines NODO-MASTER DMX (s. S2 Kippschalter-Wert in Tabelle 2) für jeden NODO-MASTER DMX eine freie Adresse auswählen und anhand der S4 Kippschalter zuweisen.
Schalter S4-1 bis S4-9 werden für die Auswahl der von der NODO-MASTER DMX belegten DMX-Startadresse verwendet. S. nachstehende Tabelle 3 mit der binären Kodierung 0 = OFF, 1 = ON.

DMX Adresse	Kippschalter-Nr.									
	10	9	8	7	6	5	4	3	2	1
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
2	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
3	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
4	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
5	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
6	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF
7	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
8	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
9	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
10	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF
11	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
12	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
13	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
14	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
15	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON
16	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
17	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
18	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF
19	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
20	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
21	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
22	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
23	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON
24	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
25	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
26	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF
27	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON
28	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
29	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON
30	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF
31	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON
32	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
33	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
34	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
35	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
36	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
37	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
38	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
39	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON
40	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
41	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
42	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF
43	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON
44	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
45	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON
46	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF
47	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON
48	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
49	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
50	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF
51	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON
52	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
53	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON
54	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF
55	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON
56	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
57	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON
58	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF
59	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON
60	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF
61	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON
62	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF
63	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON

DMX Adresse	Kippschalter-Nr.									
	10	9	8	7	6	5	4	3	2	1
64	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
65	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
66	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF
67	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON
68	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
69	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
70	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF
71	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON
72	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
73	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON
74	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF
75	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON
76	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
77	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON
78	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF
79	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON
80	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
81	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON
82	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF
83	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON
84	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
85	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON
86	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF
87	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON
88	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
89	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON
90	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF
91	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON
92	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF
93	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON
94	OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF
95	OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON	ON
96	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
97	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON
98	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF
99	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON
100	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
101	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON
102	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF
103	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON
104	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
105	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON
106	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF
107	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON
108	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF
109	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON
110	OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF
111	OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON	ON
112	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
113	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON
114	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF
115	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON
116	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF
117	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON
118	OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF
119	OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON	ON
120	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF
121	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON
122	OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF
123	OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON	ON
124	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF
125	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF	ON
126	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF
127	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON

Tableau 3-1: *Einstellung der DMX-Adresse*

DMX Adresse	Kippschalter-Nr.									
	10	9	8	7	6	5	4	3	2	1
128	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
129	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
130	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF
131	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON
132	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
133	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON
134	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF
135	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON
136	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
137	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON
138	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF
139	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON
140	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
141	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON
142	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF
143	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON
144	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
145	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON
146	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF
147	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON
148	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
149	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON
150	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF
151	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON
152	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
153	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON
154	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF
155	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON
156	OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF
157	OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON
158	OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF
159	OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON	ON
160	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
161	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON
162	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF
163	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON
164	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
165	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON
166	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF
167	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON
168	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
169	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON
170	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF
171	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON
172	OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF
173	OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON
174	OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF
175	OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON	ON
176	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
177	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON
178	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF
179	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON
180	OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF
181	OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON
182	OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF
183	OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON	ON
184	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF
185	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON
186	OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF
187	OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON	ON
188	OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF
189	OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF	ON
190	OFF	OFF	ON	OFF	ON	ON	ON	ON	ON	OFF
191	OFF	OFF	ON	OFF	ON	ON	ON	ON	ON	ON

DMX Adresse	Kippschalter-Nr.									
	10	9	8	7	6	5	4	3	2	1
192	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
193	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
194	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF
195	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON
196	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
197	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON
198	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF
199	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON
200	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
201	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON
202	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF
203	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON
204	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF
205	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON
206	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF
207	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON	ON
208	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
209	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON
210	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF
211	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON
212	OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF
213	OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON
214	OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF
215	OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON	ON
216	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF
217	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON
218	OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF
219	OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON	ON
220	OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF
221	OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF	ON
222	OFF	OFF	ON	ON	OFF	ON	ON	ON	ON	OFF
223	OFF	OFF	ON	ON	OFF	ON	ON	ON	ON	ON
224	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
225	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON
226	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF
227	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON
228	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF
229	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON
230	OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF
231	OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON	ON
232	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF
233	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON
234	OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF
235	OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON	ON
236	OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF
237	OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF	ON
238	OFF	OFF	ON	ON	ON	OFF	ON	ON	ON	OFF
239	OFF	OFF	ON	ON	ON	OFF	ON	ON	ON	ON
240	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF
241	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON
242	OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF
243	OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON	ON
244	OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF
245	OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF	ON
246	OFF	OFF	ON	ON	ON	ON	OFF	ON	ON	OFF
247	OFF	OFF	ON	ON	ON	ON	OFF	ON	ON	ON
248	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF
249	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF	ON
250	OFF	OFF	ON	ON	ON	ON	ON	OFF	ON	OFF
251	OFF	OFF	ON	ON	ON	ON	ON	OFF	ON	ON
252	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF
253	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF	ON
254	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	OFF
255	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	ON

Tableau 3-2: *Einstellung der DMX-Adresse*

DMX	Kippschalter-Nr.									
Adresse	10	9	8	7	6	5	4	3	2	1
256	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
257	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
258	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
259	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
260	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
261	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
262	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF
263	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
264	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
265	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
266	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF
267	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
268	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
269	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
270	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
271	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON
272	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
273	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
274	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF
275	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
276	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
277	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
278	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
279	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON	ON
280	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
281	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
282	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON	OFF
283	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON	ON
284	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
285	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF	ON
286	OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON	OFF
287	OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON	ON
288	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
289	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
290	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
291	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
292	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
293	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
294	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
295	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON	ON
296	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
297	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
298	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON	OFF
299	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON	ON
300	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
301	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF	ON
302	OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON	OFF
303	OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON	ON
304	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
305	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
306	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON	OFF
307	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON
308	OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
309	OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF	ON
310	OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON	OFF
311	OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON	ON
312	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
313	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF	ON
314	OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON	OFF
315	OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON	ON
316	OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF	OFF
317	OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF	ON
318	OFF	ON	OFF	OFF	ON	ON	ON	ON	ON	OFF
319	OFF	ON	OFF	OFF	ON	ON	ON	ON	ON	ON

DMX	Kippschalter-Nr.									
Adresse	10	9	8	7	6	5	4	3	2	1
320	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
321	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
322	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF
323	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	ON
324	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
325	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
326	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON	OFF
327	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON	ON
328	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
329	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	ON
330	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON	OFF
331	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON	ON
332	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
333	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF	ON
334	OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON	OFF
335	OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON	ON
336	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
337	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	ON
338	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON	OFF
339	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON	ON
340	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
341	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON
342	OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON	OFF
343	OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON	ON
344	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
345	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF	ON
346	OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON	OFF
347	OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON	ON
348	OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF	OFF
349	OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF	ON
350	OFF	ON	OFF	ON	OFF	ON	ON	ON	ON	OFF
351	OFF	ON	OFF	ON	OFF	ON	ON	ON	ON	ON
352	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
353	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	ON
354	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON	OFF
355	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON	ON
356	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
357	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	ON
358	OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON	OFF
359	OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON	ON
360	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
361	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF	ON
362	OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON	OFF
363	OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON	ON
364	OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF	OFF
365	OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF	ON
366	OFF	ON	OFF	ON	ON	OFF	ON	ON	ON	OFF
367	OFF	ON	OFF	ON	ON	OFF	ON	ON	ON	ON
368	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
369	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF	ON
370	OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON	OFF
371	OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON	ON
372	OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF	OFF
373	OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF	ON
374	OFF	ON	OFF	ON	ON	ON	OFF	ON	ON	OFF
375	OFF	ON	OFF	ON	ON	ON	OFF	ON	ON	ON
376	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF	OFF
377	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF	ON
378	OFF	ON	OFF	ON	ON	ON	ON	OFF	ON	OFF
379	OFF	ON	OFF	ON	ON	ON	ON	OFF	ON	ON
380	OFF	ON	OFF	ON	ON	ON	ON	ON	OFF	OFF
381	OFF	ON	OFF	ON	ON	ON	ON	ON	OFF	ON
382	OFF	ON	OFF	ON	ON	ON	ON	ON	ON	OFF
383	OFF	ON	OFF	ON	ON	ON	ON	ON	ON	ON

Tableau 3-3: *Einstellung der DMX-Adresse*

DMX Adresse	Kippschalter-Nr.									
	10	9	8	7	6	5	4	3	2	1
384	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
385	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
386	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF
387	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	ON
388	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
389	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	ON
390	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON	OFF
391	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON
392	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
393	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	ON
394	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON	OFF
395	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON	ON
396	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
397	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	ON
398	OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON	OFF
399	OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON	ON
400	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
401	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	ON
402	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON	OFF
403	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON	ON
404	OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
405	OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF	ON
406	OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON	OFF
407	OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON	ON
408	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
409	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON
410	OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON	OFF
411	OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON	ON
412	OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF	OFF
413	OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF	ON
414	OFF	ON	ON	OFF	OFF	ON	ON	ON	ON	OFF
415	OFF	ON	ON	OFF	OFF	ON	ON	ON	ON	ON
416	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
417	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	ON
418	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON	OFF
419	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON	ON
420	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
421	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF	ON
422	OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON	OFF
423	OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON	ON
424	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
425	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF	ON
426	OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON	OFF
427	OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON	ON
428	OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF	OFF
429	OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF	ON
430	OFF	ON	ON	OFF	ON	OFF	ON	ON	ON	OFF
431	OFF	ON	ON	OFF	ON	OFF	ON	ON	ON	ON
432	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
433	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF	ON
434	OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON	OFF
435	OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON	ON
436	OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF	OFF
437	OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF	ON
438	OFF	ON	ON	OFF	ON	ON	OFF	ON	ON	OFF
439	OFF	ON	ON	OFF	ON	ON	OFF	ON	ON	ON
440	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF	OFF
441	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF	ON
442	OFF	ON	ON	OFF	ON	ON	ON	OFF	ON	OFF
443	OFF	ON	ON	OFF	ON	ON	ON	OFF	ON	ON
444	OFF	ON	ON	OFF	ON	ON	ON	ON	OFF	OFF
445	OFF	ON	ON	OFF	ON	ON	ON	ON	OFF	ON
446	OFF	ON	ON	OFF	ON	ON	ON	ON	ON	OFF
447	OFF	ON	ON	OFF	ON	ON	ON	ON	ON	ON

DMX Adresse	Kippschalter-Nr.									
	10	9	8	7	6	5	4	3	2	1
448	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
449	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
450	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON	OFF
451	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON
452	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
453	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF	ON
454	OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON	OFF
455	OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON	ON
456	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
457	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF	ON
458	OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON	OFF
459	OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON	ON
460	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF
461	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF	ON
462	OFF	ON	ON	ON	OFF	OFF	ON	ON	ON	OFF
463	OFF	ON	ON	ON	OFF	OFF	ON	ON	ON	ON
464	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
465	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF	ON
466	OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON	OFF
467	OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON	ON
468	OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF	OFF
469	OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF	ON
470	OFF	ON	ON	ON	OFF	ON	OFF	ON	ON	OFF
471	OFF	ON	ON	ON	OFF	ON	OFF	ON	ON	ON
472	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF	OFF
473	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF	ON
474	OFF	ON	ON	ON	OFF	ON	ON	OFF	ON	OFF
475	OFF	ON	ON	ON	OFF	ON	ON	OFF	ON	ON
476	OFF	ON	ON	ON	OFF	ON	ON	ON	OFF	OFF
477	OFF	ON	ON	ON	OFF	ON	ON	ON	OFF	ON
478	OFF	ON	ON	ON	OFF	ON	ON	ON	ON	OFF
479	OFF	ON	ON	ON	OFF	ON	ON	ON	ON	ON
480	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
481	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON
482	OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON	OFF
483	OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON	ON
484	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF	OFF
485	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF	ON
486	OFF	ON	ON	ON	ON	OFF	OFF	ON	ON	OFF
487	OFF	ON	ON	ON	ON	OFF	OFF	ON	ON	ON
488	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF	OFF
489	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF	ON
490	OFF	ON	ON	ON	ON	OFF	ON	OFF	ON	OFF
491	OFF	ON	ON	ON	ON	OFF	ON	OFF	ON	ON
492	OFF	ON	ON	ON	ON	OFF	ON	ON	OFF	OFF
493	OFF	ON	ON	ON	ON	OFF	ON	ON	OFF	ON
494	OFF	ON	ON	ON	ON	OFF	ON	ON	ON	OFF
495	OFF	ON	ON	ON	ON	OFF	ON	ON	ON	ON
496	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF
497	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF	ON
498	OFF	ON	ON	ON	ON	ON	OFF	OFF	ON	OFF
499	OFF	ON	ON	ON	ON	ON	OFF	OFF	ON	ON
500	OFF	ON	ON	ON	ON	ON	OFF	ON	OFF	OFF
501	OFF	ON	ON	ON	ON	ON	OFF	ON	OFF	ON
502	OFF	ON	ON	ON	ON	ON	OFF	ON	ON	OFF
503	OFF	ON	ON	ON	ON	ON	OFF	ON	ON	ON
504	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF
505	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF	ON
506	OFF	ON	ON	ON	ON	ON	ON	OFF	ON	OFF
507	OFF	ON	ON	ON	ON	ON	ON	OFF	ON	ON
508	OFF	ON	ON	ON	ON	ON	ON	ON	OFF	OFF
509	OFF	ON	ON	ON	ON	ON	ON	ON	OFF	ON
510	OFF	ON	ON	ON	ON	ON	ON	ON	ON	OFF
511	OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON

Tableau 3-4: *Einstellung der DMX-Adresse*

NB: auf dem Kippschalter S4 ist Nr. 1 ganz rechts, 10 ganz links und EIN unten!

NB: Folgendes beachten:

DMX Adresse	Kippschalter-Nr.									
	10	9	8	7	6	5	4	3	2	1
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON

beziehen sich beide auf Adresse Nr. 1.

NB: S4-10 wird nicht verwendet und muss immer auf AUS stehen.

Beispiel:
NODO-MASTER DMX N. 1 eingestellt auf DIRECT RGB, NODO-MASTER DMX N. 2 eingestellt auf DIRECT MONOCHROME, NODO-MASTER DMX N. 3 eingestellt auf INDIRECT MONOCHROME:

NODO-MASTER DMX N. 1
S4 ist auf Adresse Nr. 5 eingestellt, so dass ON-OFF-ON-OFF-OFF-OFF-OFF-OFF-OFF-OFF
S2 ist eingestellt auf: ON-OFF-OFF-OFF, nutzt 3 Adressen

NODO-MASTER DMX N. 2
S4 muss auf Adresse Nr. 8 eingestellt werden (NODO-MASTER DMX N.1: S4 Wert + NODO-MASTER DMX N.1: S2 Wert).
Somit ist S4 eingestellt auf: OFF-OFF-OFF-ON-OFF-OFF-OFF-OFF-OFF-OFF
S2 ist eingestellt auf: OFF-ON-OFF-OFF, nutzt 1 Adresse

NODO-MASTER DMX N. 3
S4 muss auf Adresse Nr. 9 eingestellt werden (NODO-MASTER DMX N.2: S4 Wert + NODO-MASTER DMX N.2: S2 Wert).
Somit ist S4 eingestellt auf: ON-OFF-OFF-ON-OFF-OFF-OFF-OFF-OFF-OFF
S2 ist eingestellt auf: OFF-OFF-OFF-ON, nutzt 1 Adresse

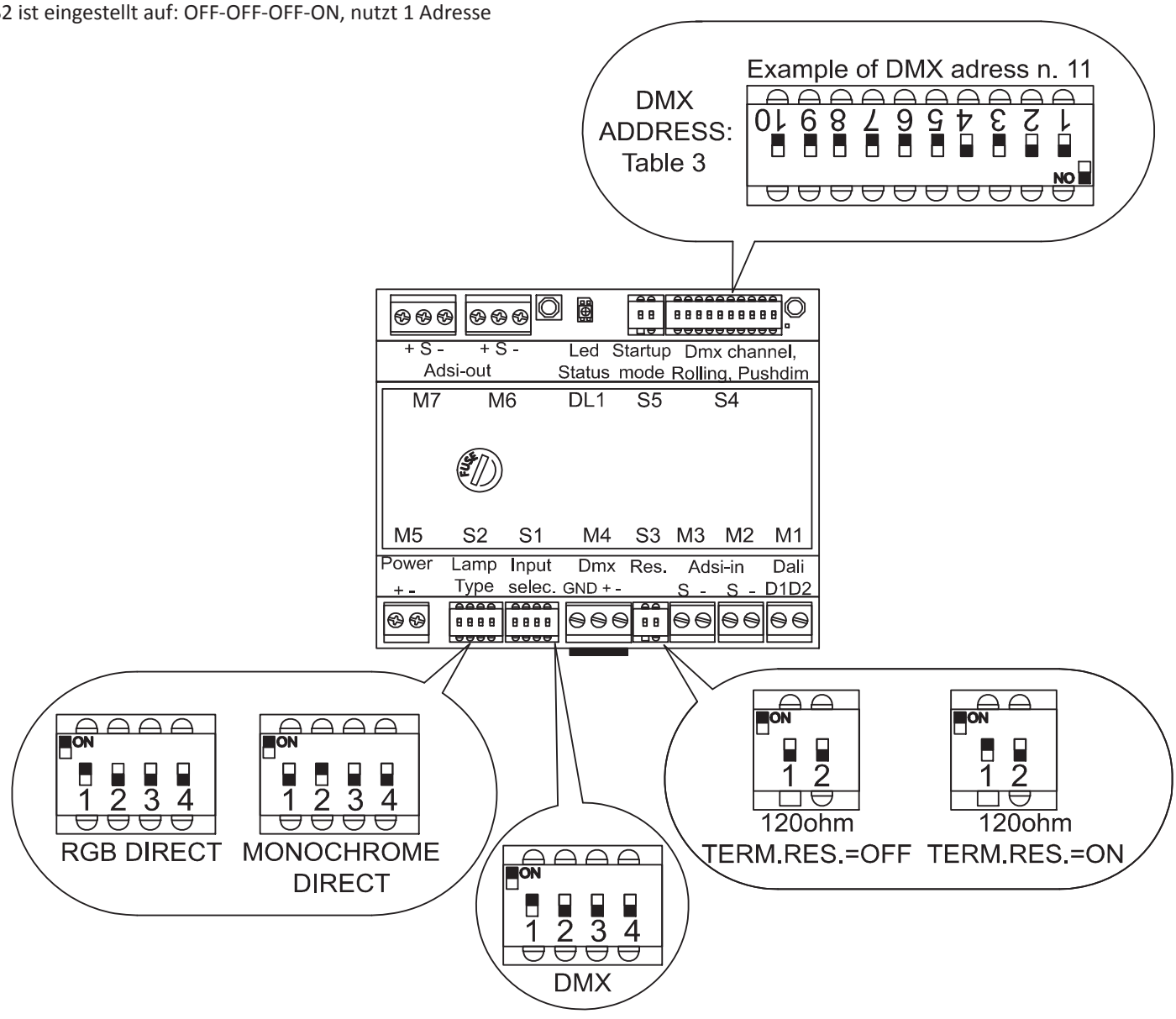


Abb. 7: *Einstellung der Kippschalter in Betriebsart „DMX" (Für verschiedene Kombinationen von Leuchtkörpern s. auch Tabelle 2 in Kap. 6.2 und Tabelle 3 in Kapitel 7.2 bzgl. der DMX-Adressen)*

8 – EINSTELLUNG NODO-MASTER IN „SLAVE“-BETRIEB

8-1 - VERBINDUNGEN

Kabel wie in Abschnitt 5 gezeigt verwenden. S. Abb. 3b.
Stromkabel von der Stromversorgung mit der Klemmleiste M5 unter Beachtung der Polarität verbinden.
Stromkabel zu den Leuchtkörpern mit der Klemmleiste M6 unter Beachtung der Polarität verbinden.
„-“ und „S“ von M7 des „Master“ NODO-MASTER DMX mit „-“ und „S“ auf M2 des „Slave“ NODO-MASTER unter Beachtung der Polarität verbinden.
In „Slave“ NODO-MASTER weder M1 mit DALI Bus, noch M4 mit DMX Bus verbinden.

8.2 - EINSTELLUNGEN DER KIPPSCHALTER FÜR SLAVE-BETRIEB

S. Abb. 8.

Zur Einstellung des Bus-Typs die S1 Kippschalter ermitteln. SLAVE-Einstellung
- S1-1: OFF
- S1-2: OFF
- S1-3: ON
- S1-4: OFF

Einstellung von S2: auf den „Slave“ NODO-MASTER die Einstellung für „Master“ NODO-MASTER kopieren, mit dem der „Slave“ NODO-MASTER verbunden ist. In „Slave“ NODO-MASTER eingestellte Adressen sind auf DALI oder DMX Bus nicht belegt.

S3 und S4 sind im „Slave“ NODO-MASTER Modus bedeutungslos.

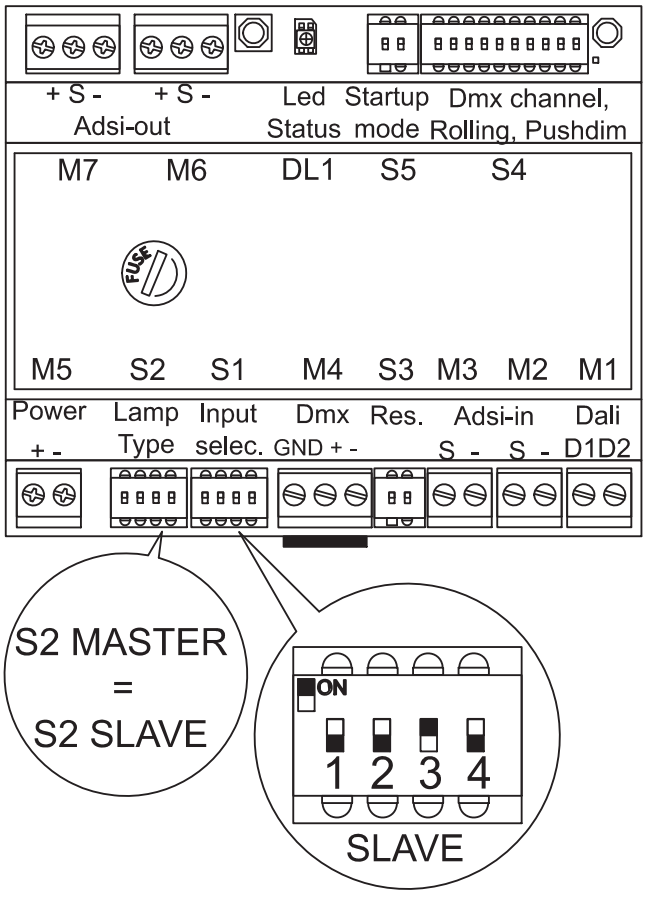


Abb. 8: *Einstellung der Kippschalter in Betriebsart „SLAVE“*

9 – EINSTELLUNG NODO-MASTER IN „ROLLING“-BETRIEB

9.0 - EINLEITUNG

Der „ROLLING“-Betrieb kann in einfachen Anlagen für den Anlagenbetrieb ohne externes DALI- oder DMX-Umfeld verwendet werden.
In diesem Betriebsmodus können:

- Die Farben für das Rolling ausgewählt werden: auch wenn das System aus RGB-Modulen besteht, ist es möglich, nur die gewünschten Farben für die Rolling-Einstellung auszuwählen (in einem RGB-System ist es beispielsweise möglich, GRÜN auszuschalten und nur ROT und BLAU zu verwenden).
- Die Rolling-Geschwindigkeit ausgewählt werden
- Das System über einen Drucktaster ein- und ausgeschaltet werden und das Rolling ein- und ausgeschaltet werden.

In diesem Modus erzeugt der NODO-MASTER selbst eine Befehlssequenz, die für die Ein- und Ausschaltung und das Dimmen aller Leuchtkörperarten erforderlich ist.
Unter der Voraussetzung, dass folgende „Farben“ im Abschnitt vertreten und mit S4-Kippschaltern korrekt aktiviert sind, wird im Test folgende Reihenfolge verwendet:

Direkt RGB in der Reihenfolge rot, grün, blau
Direkt monochrom (weiß, rot, grün, blau, bernsteinfarben)
Indirekt RGB in der Reihenfolge rot, grün, blau
Indirekt monochrom (weiß, rot, grün, blau, bernsteinfarben).

Für den Test des Systems vor Aktivierung des DALI- oder DMX-Umfelds kann auch der ROLLING-Betrieb verwendet werden: wenn alle Module im ROLLING-Modus einwandfrei arbeiten, muss die Ursache einer nach DALI- oder DMX-Aktivierung auftretenden Störung im DALI- oder DMX-Bus und/oder in der NODOMASTER Adressierung gesucht werden.

9.1 - VERBINDUNGEN

Kabel wie in Abschnitt 5 gezeigt verwenden. S. Abb. 3a und 3b.
Kabel von Drucktaster zu Klemmleisten M3-M5 anschließen.
NB: einen normalerweise offenen Drucktaster für den Kurzschluss „+“ an Klemmleisten M3 und M5 verwenden.
Stromkabel von der Stromversorgung mit der Klemmleiste M5 unter Beachtung der Polarität verbinden.
Stromkabel zu den Leuchtkörpern mit der Klemmleiste M6 unter Beachtung der Polarität verbinden.
Bei einer „Master-Slave“-Anordnung „-“ und „S“ von M7 des „Master“ NODO-MASTER DMX mit „-“ und „S“ auf M2 des „Slave“ NODO-MASTER unter Beachtung der Polarität verbinden. Abb. 3b.

9.2 - EINSTELLUNGEN DER KIPPSCHALTER FÜR ROLLING-BETRIEB

S. Abb. 9.

Zur Einstellung des ROLLING-Betriebs die S1 Kippschalter ermitteln und auf jeden unabhängigen NODO-MASTER oder „Master“ NODO-MASTER (S1 NICHT auf „Slave“ NODO-MASTER einstellen) folgendermaßen einstellen:

S1-1: OFF
S1-2: OFF
S1-3: OFF
S1-4: ON.

NB: in diesem Modus werden nur Synchronisierungen zwischen „Master“ NODO-MASTER und „Slave“ NODO-MASTER reproduziert.

Wenn der ROLLING BETRIEB zum Systemtest vor der DALI- oder DMX-Installation verwendet wird, erfolgen Synchronisierungen zwischen verschiedenen „Master“ NODO-MASTER oder verschiedenen unabhängigen NODO-MASTER anhand einer DALI- oder DMX-Gruppierung NICHT im ROLLING Modus.

Zur Einstellung der **zur Rolling-Einstellung gehörigen Kanäle** die S4 Kippschalter ermitteln und Kippschalter 1-8 entsprechend nachfolgender Tabelle 4 einstellen. Wenn der Kippschalter Nummer „N“ auf EIN geschaltet wird, wird Kanal „N“ rollen.

NB: Wenn alle Kippschalter auf AUS gestellt werden, schaltet sich ein besonderer Betriebsmodus ein. S. Kapitel „EINSTELLUNG DES NODO-MASTER AUF PUSHDIM-BETRIEB“.

	Kippschalter S4							
	S4-8	**S4-7**	**S4-6**	**S4-5**	**S4-4**	**S4-3**	**S4-2**	**S4-1**
	Indirekt Monochr.	Indirekt Blau	Indirekt Grün	Indirekt Rot	Direkt Monochr.	Direkt Blau	Direkt Grün	Direkt Rot
Direkt RGB	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
Direkt Rot	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
Direkt Rot, Blau	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
Direkt RGB, Indirekt Monochrom	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Direkt Grün, Blau Indirekt RGB	OFF	ON	ON	ON	OFF	ON	ON	ON

Tabelle 4: *Beispiele für die Einstellung der Kippschalter S4 in Betriebsart ROLLING um Farben aus der Rolling-Einstellung auszuwählen*

Zur Einstellung der Rolling-Geschwindigkeit die S4-Kippschalter ermitteln und Kippschalter 9-10 entsprechend nachfolgender Tabelle 5 einstellen.

Geschwindigkeit	**Kippschalter S4**	
	S4-10	**S4-9**
Sehr langsam	OFF	OFF
Langsam	OFF	ON
Mittel	ON	OFF
Schnell	ON	ON

Tabelle 5: *Einstellung der Kippschalter S4 in Betriebsart ROLLING um die Rolling-Geschwindigkeit auszuwählen*

Zur Einstellung des SWITCH-ON Betriebs (s. auch 9.3) den S5 Kippschalter ermitteln und gemäß Tabelle 6 einstellen.

SWITCH-ON mode	**Kippschalter S5**	
	S5-1	**S5-2**
Sicherheit: System bleibt nach Verlust der und Rückkehr zur Stromversorgung ausgeschaltet	OFF	OFF
Wandschalter: System stellt die letzte der nach Verlust und Wiederherstellung der Stromversorgung gespeicherte Szene wieder her	ON	OFF

Tabelle 6: *Einstellung der Kippschalter S5 in Betriebsart ROLLING zwecks Auswahl der Betriebsart SWITCH-ON nach Verlust der und Rückkehr zur Stromversorgung.*

NB: Bitte nehmen Sie folgende Bedeutung dieser Betriebsarten zur Kenntnis:

- **Sicherheit: sicher ausgeschaltetes System nach Verlust und Wiederherstellung der Stromversorgung.**
- **Wandschalter: Möglichkeit der Ein- und Ausschaltung des Systems über einen Wand- oder Zeitschalter. Die letzte gespeicherte Szene wird wiederhergestellt, wenn der Wand- oder Zeitschalter wieder aktiviert wird.**

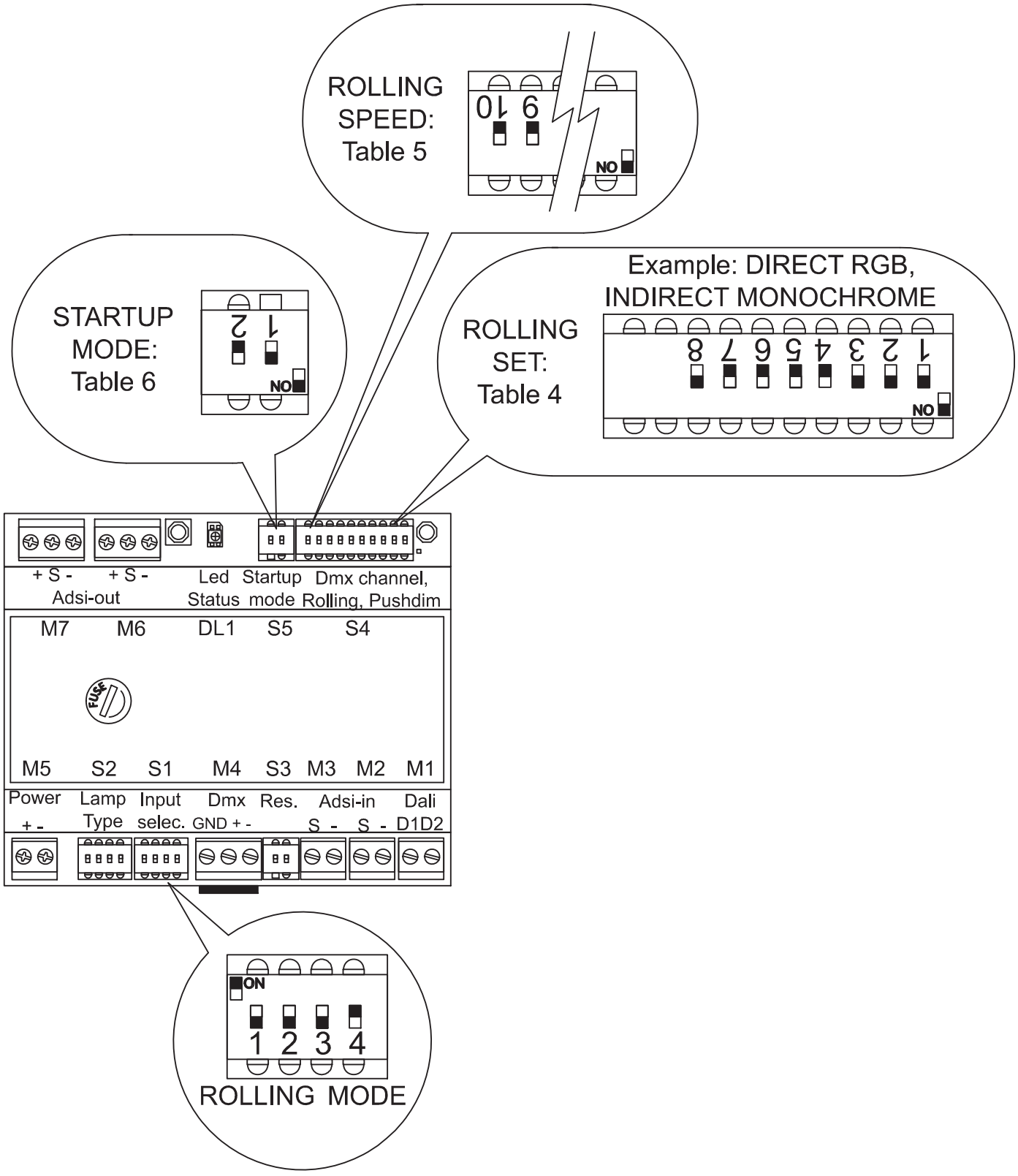


Abb. 9: *Einstellung der Kippschalter in Betriebsart ROLLING*

9.3 - FUNKTION DES DRUCKTASTERS

Der normalerweise offene, mit den Klemmleiste M3-M5 verbundene Drucktaster kann verwendet werden, um:
- Das System mit einem „langen“ Druck ein- und auszuschalten.
- Das „Rolling“ mit einem „kurzen“ Druck zu starten und zu stoppen.
- Es wird darauf hingewiesen, dass es **NICHT** möglich ist, das System mit dem Drucktaster von Hand zu dimmen.
- Wenn es erforderlich ist, mehrere NODO-MASTER mit demselben Drucktaster zu verbinden, ist es möglich, mehrere NODO-MASTER untereinander in einer Konfiguration Master-Slave zu verbinden, siehe Abb. 3b und Kapitel 8. Der normalerweise offene Druck taster ist zum „Master“ NODO-MASTER zu verbinden.

Anwendungsbeispiele:
- **„Rolling“-Betrieb bei jedem Start einschalten:**
  - „Wandschalter“ auf S5 Kippschalter stellen.
  - Das Rollen von Hand durch langen Druck aktivieren.
  - Hauptschalter über einen Wand- oder Zeitschalter ausschalten.
  - Das Rolling beginnt wieder, wenn der Wand- oder Zeitschalter wieder aktiviert wird.

- **Die gleiche feststehende Szene bei jedem Start aktivieren:**
  - „Wandschalter“ auf S5 Kippschalter stellen.
  - Das Rollen von Hand durch langen Druck aktivieren.
  - Warten, bis das System die gewünschte Szene erreicht.
  - Rollen über kurzen Druck stoppen.
  - Hauptschalter über einen Wand- oder Zeitschalter ausschalten.
  - Die Szenerie wird wiederhergestellt, wenn der Wand- oder Zeitschalter wieder aktiviert wird.

10 – EINSTELLUNG NODO-MASTER IN „PUSHDIM“-BETRIEB

10.0 - EINLEITUNG

Der „PUSHDIM“-Modus kann in einfachen Anlagen für MONOCHROME Module ohne externes DALI- oder DMX-Umfeld verwendet werden.
In dieser Betriebsart kann/können über Drucktaster:
- Das System ein- und ausgeschaltet werden.
- Monochrome Module von Hand gedimmt werden.

In dieser Betriebsart erzeugt der NODO-MASTER selbst eine Befehlssequenz, die für die Ein- und Ausschaltung und das Dimmen der einfarbigen Leuchtkörper erforderlich ist.

Die Betriebsart PUSHDIM kann nur bei monochromen, mit Kanal 4 (direkt monochrom) oder 8 (indirekt monochrom) verbundenen Modulen aktiviert werden.

10.1 - VERBINDUNGEN

Kabel wie in Abschnitt 5 gezeigt verwenden. S. Abb. 3a und 3b.
Kabel von Drucktaster zu Klemmleisten M3-M5 anschließen.
NB: einen normalerweise offenen Drucktaster für den Kurzschluss „+“ an Klemmleisten M3 und M5 verwenden.
Stromkabel von der Stromversorgung mit der Klemmleiste M5 unter Beachtung der Polarität verbinden.
Stromkabel zu den Leuchtkörpern mit der Klemmleiste M6 unter Beachtung der Polarität verbinden.
Bei einer „Master-Slave“-Anordnung „-“ und „S“ von M7 des „Master“ NODO-MASTER DMX mit „-“ und „S“ auf M2 des „Slave“ NODO-MASTER unter Beachtung der Polarität verbinden. Abb. 3b.

10.2 - EINSTELLUNGEN DER KIPPSCHALTER FÜR PUSHDOWN-BETRIEB

S. Abb. 10.

Zur Einstellung des PUSHDIM-Betriebs die S1 Kippschalter ermitteln und auf jeden unabhängigen NODO-MASTER oder „Master“ NODO-MASTER (S1 NICHT auf „Slave“ NODO-MASTER einstellen) folgendermaßen einstellen:
S1-1: OFF
S1-2: OFF
S1-3: OFF
S1-4: ON.

NB: in diesem Betrieb werden nur Synchronisierungen zwischen „Master“ NODO-MASTER und „Slave“ NODO-MASTER reproduziert.
S4 Kippschalter zur Aktivierung der PUSHDIM-Betriebsart einstellen. S. Tabelle 7.

	Kippschalter S4							
	S4-8	**S4-7**	**S4-6**	**S4-5**	**S4-4**	**S4-3**	**S4-2**	**S4-1**
	Indirekt Monochr.	Indirekt Blau	Indirekt Grün	Indirekt Rot	Direkt Monochr.	Direkt Blau	Direkt Grün	Direkt Rot
PUSHDIM	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

Tabelle 7: *Einstellung der Kippschalter S4 in für PUSHDIM-Betrieb*

In dieser Betriebsart sind Kippschalter in Verbindung mit der **Rolling Geschwindigkeit** (S4-9 und S4-10) bedeutungslos.

Zur Einstellung des SWITCH-ON Betriebs (s. auch 10.3 unten): den S5 Kippschalter ermitteln und gemäß Tabelle 8 einstellen.

SWITCH-ON mode	**Kippschalter S5**	
	S5-1	**S5-2**
Sicherheit: System bleibt nach Verlust der und Rückkehr zur Stromversorgung ausgeschaltet	OFF	OFF
Wandschalter: System stellt die letzte der nach Verlust und Wiederherstellung der Stromversorgung gespeicherte Szene wieder her	ON	OFF

Tabelle 8: *Einstellung der Kippschalter S5 in Betriebsart PUSHDIM zwecks Auswahl der Betriebsart SWITCH-ON nach Verlust und Rückkehr zur Stromversorgung.*

NB: Bitte nehmen Sie folgende Bedeutung dieser Betriebsarten zur Kenntnis:
- **Sicherheit: sicher ausgeschaltetes System nach Verlust und Wiederherstellung der Stromversorgung**
- **Wandschalter: Möglichkeit der Ein- und Ausschaltung des Systems über einen Wand- oder Zeitschalter. Die letzte gespeicherte Szene wird wiederhergestellt, wenn der Wand- oder Zeitschalter wieder aktiviert wird.**

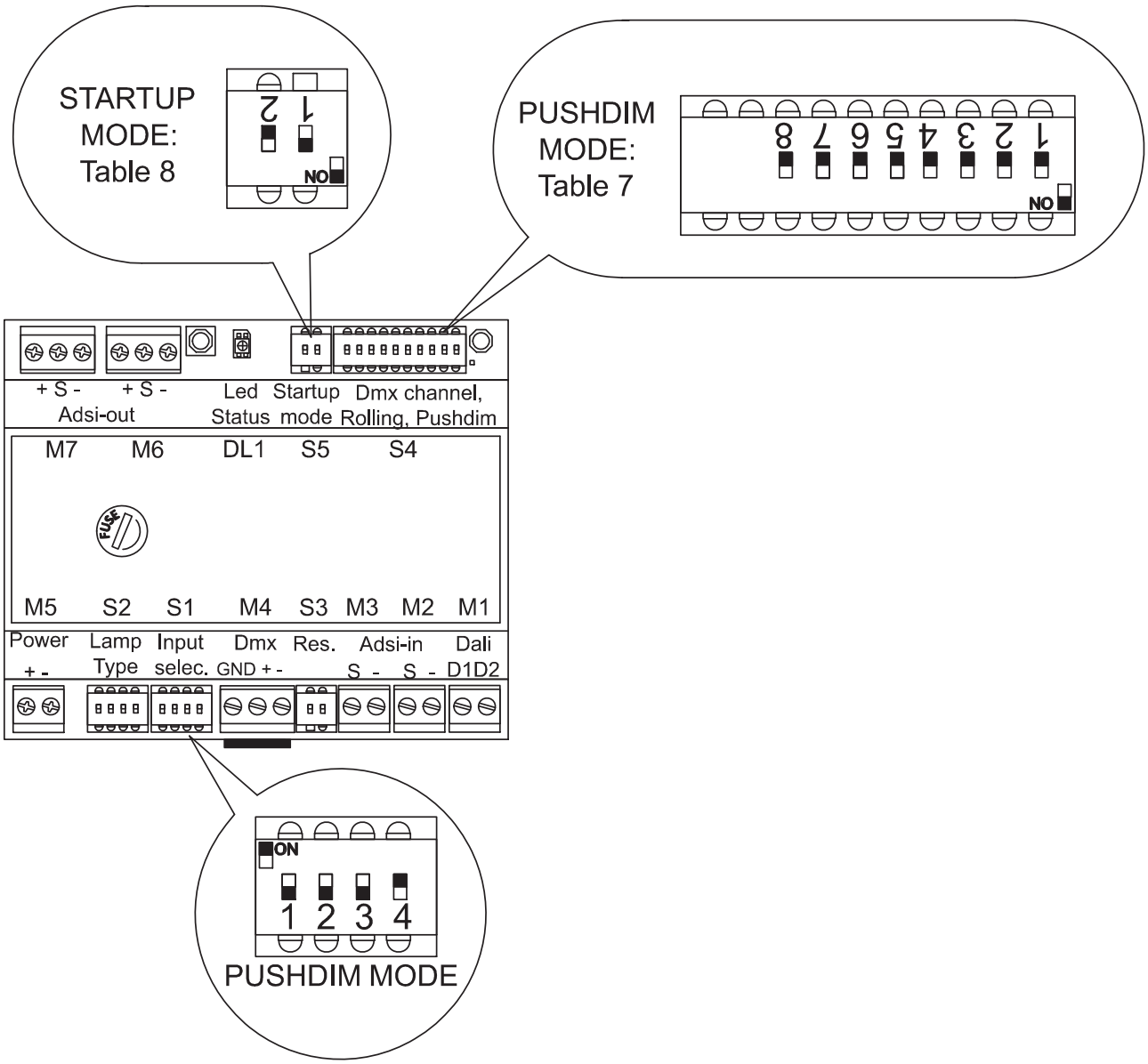


Abb. 10: *„Einstellung der Kippschalter in Betriebsart „PUSHDIM“*

10.3 - FUNKTION DES DRUCKTASTERS

Der normalerweise offene, mit den Klemmleiste M3-M5 verbundene Drucktaster kann verwendet werden, um:
- Das System mit einem „kurzen“ Druck ein- und auszuschalten.
- Das System mit einem „langen“ Druck zu dimmen. Das System blendet ab, bis die Drucktaste gedrückt wird.
- Wenn die maximale oder minimale Intensität erreicht wird, wird die Dimmfunktion ausgeschaltet; die Drucktaste muss losgelassen und wieder gedrückt werden, um die Dimm-Kurve umzukehren und wieder zu dimmen.
- Bei jedem Loslassen der Drucktaste und erneutem Druck wird die Dimm-Kurve umgekehrt (bei zunehmender Intensität vor dem Loslassen der Drucktaste wird diese Intensität nach dem nächsten Druck nachlassen).
- Wenn es erforderlich ist, mehrere NODO-MASTER mit demselben Drucktaster zu verbinden, ist es möglich, mehrere NODO-MASTER untereinander in einer Konfiguration Master-Slave zu verbinden, siehe Abb. 3b und Kapitel 8. Der normalerweise offene Druck taster ist zum „Master“ NODO-MASTER zu verbinden.

Anwendungsbeispiele:
- **Bei jedem Start die gleiche feststehende Lichtstärke aktivieren:**
  - „Wandschalter“ auf S5 Kippschalter stellen.
  - Gewünschte Intensität durch langen Druck auswählen.
  - Hauptschalter über einen Wand- oder Zeitschalter ausschalten.
  - Die Szenerie wird wiederhergestellt, wenn der Wand- oder Zeitschalter wieder aktiviert wird.

11 – TEST DES SYSTEMS, FEHLERMELDUNGEN

Nach Einschaltung der Stromversorgung können folgende Situationen auftreten:

a) Der Betrieb ist in jedem Abschnitt einwandfrei, die von der Master-Slave Anordnung vorgesehene Synchronisierung (sofern vorhanden) wird eingehalten und zeigt die Farben in der richtigen Reihenfolge.

b) RGB Leuchtkörper (oder einige davon) sind permanent bei maximaler Intensität (also weiß) EINgeschaltet, MONOCHROME Leuchtkörper (oder einige davon) durchlaufen einen Zyklus von minimaler bis maximaler Intensität und bleiben dann durchgängig bei maximaler Intensität: das bedeutet, dass die „S“-Verbindung zwischen NODO-MASTER und dem Abschnitt nicht richtig hergestellt ist (Unterbrechungen, Fehlkontakte...).

c) Die „Status-LED“ des NODO-MASTER leuchtet durchgängig GRÜN, aber der Abschnitt ist AUSgeschaltet; das bedeutet, dass die Verbindung „+“ und „-“ zwischen NODO-MASTER und dem Abschnitt fehlerhaft ist (Unterbrechung, Fehlkontakte, umgekehrte Polarität, durchgebrannte Sicherung...).

d) Die „Status-LED“ des NODO-MASTER ist AUS und der Abschnitt ist AUSgeschaltet; das bedeutet, dass die Verbindung „+“ und „-“ zwischen der Stromversorgung und dem NODO-MASTER fehlerhaft ist (Unterbrechung, Fehlkontakte, umgekehrte Polarität). Prüfen, ob auf M5 48VDC bei korrekte Polarität vorhanden ist, wenn nicht, sind der NODO-MASTER und die Sicherung fehlerhaft.

e) Die „Status Led“ des NODO-MASTER ist EINgeschaltet, leuchtet aber nicht durchgängig GRÜN, Folgendes prüfen:
- LED leuchtet durchgängig ROT; NODO-MASTER ist fehlerhaft oder Kurzschluss auf M6 (oder M7) Ausgang.
- LED ist 1 Sek. ROT, 1 Sek. GRÜN, Überlast auf M6 (oder M7) (niedrige Spannung).
- LED ist 2 Sek. ROT, 2 Sek. GRÜN; Überlast auf M5.
- LED ist 5 Sek. ROT, 5 Sek. GRÜN; NODO-MASTER Überhitzung.

TABLA DE CONTENIDOS

1 – INTRODUCCIÓN

El objetivo de NODO-MASTER DALI o NODO-MASTER DALI/DMX consiste en conectar un medio DALI o medio DMX a las luminarias de Artemide suministrando un controlador para ADSI (interfaz de señal digital de Artemide).
Además del bus DALI o DMX, también es posible activar un motor autorrotatorio interno, o una interfaz pulsando un botón.

La característica principal del bus ADSI de 3 cables, radica en dividir el bus con corriente (el bus de alimentación) de los comandos (bus digital). Entre los límites de corriente máxima dada por la unidad de suministro de corriente, y las restricciones de los cables de alimentación, es posible gestionar secciones mayores que si se usan otros sistemas de 4 cables. El uso de comandos digitales y diseños de circuitos particulares permite mantener un brillo constante en todos los aparatos de una sección, y sin cambio de brillo entre el último dispositivo de una sección y el primero de la sección siguiente.

Otra característica interesante es la posibilidad de compartir distinta tecnología y/o dispositivos funcionales en una misma sección: RBG difusión directa, directa con potencia monocromática …

En diseños complejos, existen disponibles hasta 8 canales independientes en cada sección. Independientemente de si los productos se encuentran disponibles en el catálogo, le presentamos algunos ejemplos de configuraciones en una sección:
- Aparatos de suspensión, emisión directa difusora RGB (canales n 1, 2, 3), emisión indirecta en blanco (canal nº 8)
- Aparatos para techos, emisión directa RGB (canales nº 1, 2, 3), emisión directa difusora en azul (canal nº 4)
- Aparatos integrados en superficie, emisión directa difusora en blanco (canal nº 4), emisión difusora RGB (canales nº 1, 2, 3).

Cada canal utilizado en el bus ADSI corresponde a una dirección utilizada del bus DALI o DMX.

NB: cuando se utilicen equipos NODO-MASTER DALI o NODO-MASTER DALI/DMX en modo DALI o DMX, no pueden auto-generar ningún comando ADSI. De esta manera siempre requiere que los comandos de «encendido», «apagado», «regulación de iluminación», «restablecimiento de escenario» etc. sean generados por el medio DALI o DMX. En consecuencia es obligatorio anticipar en estos buses los dispositivos adecuados para el comando.

Los equipos NODO-MASTER DALI o NODO-MASTER DALI/DMX pueden auto-generar comandos ADSI sólo en modo ROLLING o PUSHDIM, véanse párrafos 9 y 10.

A continuación el término «NODO-MASTER» se empleará tanto para «NODO-MASTER DALI» como para»NODO-MASTER DALI/DMX».
Si una función sólo se presenta en un dispositivo, se especificará en cual:
- NODO-MASTER DALI: es decir, NODO-MASTER DALI o NODO-MASTER DALI/DMX en modo DALI
- NODO-MASTER DMX: es decir. NODO-MASTER DALI/DMX en modo DMX.

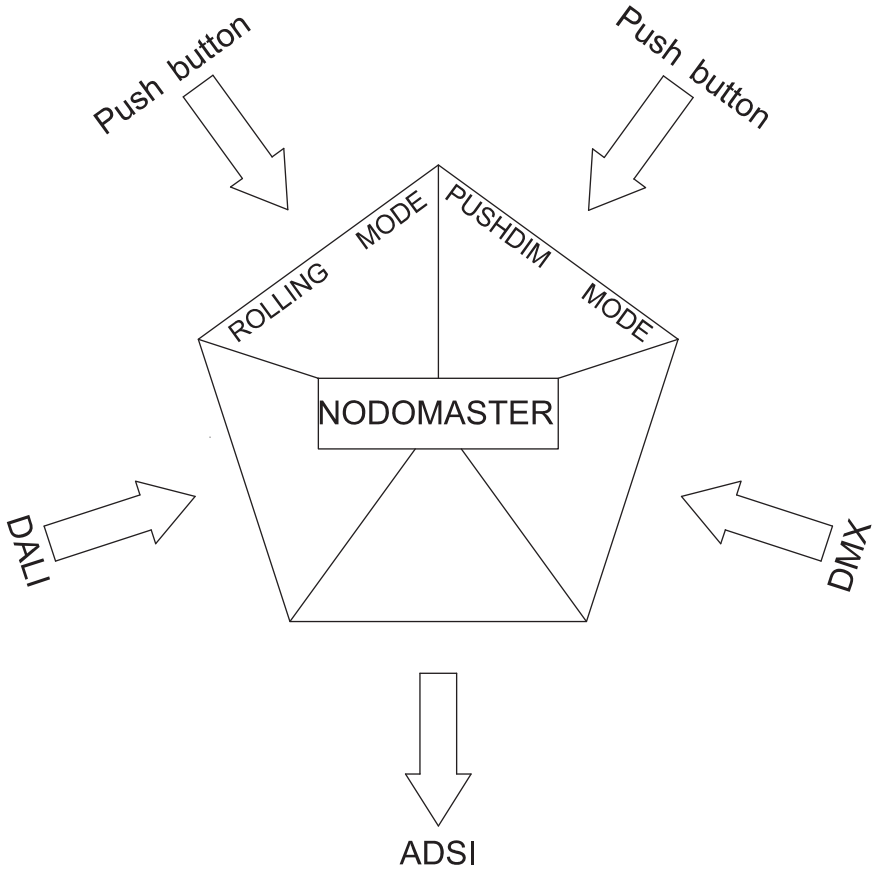


Fig. 1: *Interacciones en Nodo-Master*

2 – DISPOSICIÓN DE LUMINARIAS, LÍMITES OBLIGATORIOS

A continuación algunos disposiciones comunes, que pueden utilizarse para conectar dispositivos ADSI a un NODO-MASTER.

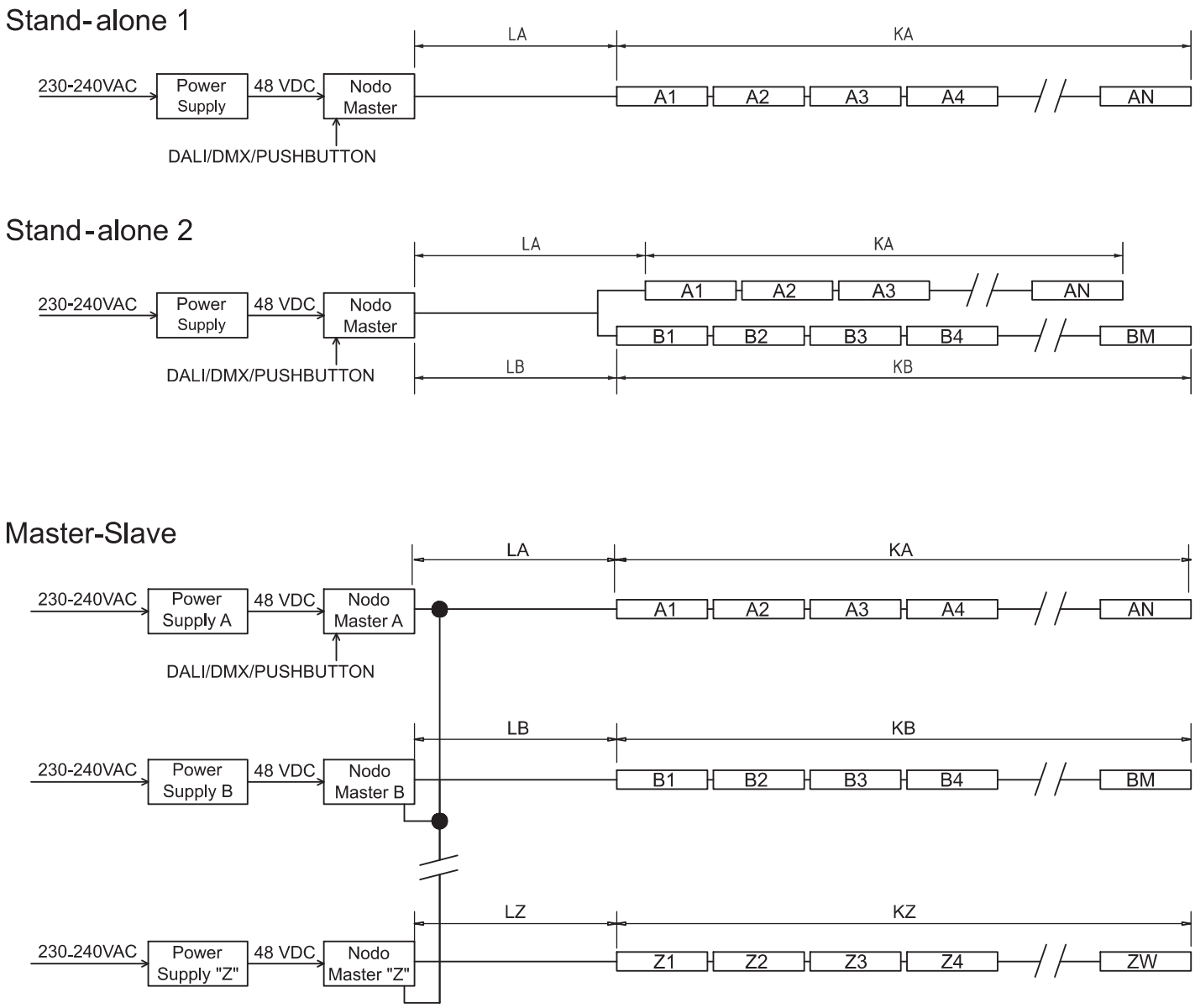


Fig. 2: *Disposiciones comunes*

- Disposición «Stand-alone 1»: Unidad de alimentación, NODO-MASTER: este es la disposición más sencilla, la unidad de alimentación y NODO-MASTER suministran sólo a una sección de aparatos.
- Disposición « Stand-alone 2»: Unidad de alimentación, NODO-MASTER, dos secciones de aparatos: este disposición se utiliza, por ejemplo cuando NODO-MASTER se encuentra en el medio de una sección.
- Disposición «Maestro-Esclavo»: Alimentación 1, NODO-MASTER 1 para sección 1; Alimentación 2; NODO-MASTER 2 para Sección 2: en caso de secciones demasiado largas (superiores a los límites de NODO-MASTER) permite sincronizar cada sección a las demás. NODO-MASTER 1 es el «maestro» (el único reconocido por el medio DALI/DMX, ocupando direcciones en el bus), todos los otros están configurados como «esclavo» (no ocupan direcciones en el bus DALI/DMX).

- Potencia máxima: generalmente, la potencia máxima en una sección se encuentra limitada al 90% de la unidad de suministro eléctrico que alimenta NODO-MASTER y la sección. Véase Tabla 1 para la potencia aconsejada para el equipo.

- El número máximo de aparatos en una sección conectados a un NODO-MASTER es 25. En la sección «maestro» de una disposición «Maestro Esclavo», el número de NODO-MASTER «Esclavo» tiene que incluirse en los 25 aparatos. Por ejemplo, si existen 3 NODO-MASTER «esclavos» conectados al maestro, en la sección del maestro el número máximo de aparatos es 25-3=22. Véase también Tabla 1 para los límites.

- Longitud máxima de sección conectada a un NODO-MASTER: dado que todos los aparatos son adyacentes, sin espacios vacíos entre ellos, siendo L la longitud de cable entre NODO-MASTER y el 1er dispositivo de la sección (en caso de Stand-alone 2, L=LA+LB) y K la longitud total de módulos (en caso de Stand-alone 2, K=KA+KB), véase Tabla 1 a continuación para determinar K.

- Los límites de longitud por sección, el número máximo de aparatos en la misma sección, la potencia máxima están relacionados con las características eléctricas de los aparatos de la sección, y con el área de sección de cables usado para el paso del cableado. Por estos motivos, véanse también las restricciones descritas en el catálogo Artemide.

Tipo de instalación	Tipo de módulo	Longitud de los módulos (m)	Sección de cable de alimentación (mm^2)	L (Longitud de cable de alimentación) (m)	K max (Longitud total de módulos) (m)	N. max (Total de módulos)	Potencia del equipo (W)
Aparatos de suelo	RGB	0.6	0.75	5	**12**	20	240
				10	**8.4**	14	
				15	**6.6**	11	
		0.9	0.75	5	**10.8**	12	240
				10	**9**	10	
				15	**7.2**	8	
			1.5	15	**10.8**	12	
			2.5	15	**12.6**	14	320
		1.2	1.5	5	**14.4**	12	320
				10	**12**	10	
				15	**10.8**	9	
			2.5	5	**14.4**	12	320
				10	**13.2**	11	
				15	**12**	10	
	Blanco	0.6	0.75	15	**12**	20	100
		0.9	0.75	15	**9.9**	11	100
				5	**18**	20	240
				10	**16.2**	18	
				15	**13.5**	15	
		1.2	0.75	5	**20.4**	17	240
				10	**16.8**	14	
				15	**13.2**	11	
			1.5	15	**18**	15	
Suspensión Plafóniera Empotrado	RGB	1.2	2.5	10	**15.6**	13	320
				15	**14.4**	12	
		2.4	2.5	10	**14.4**	6	320
				15	**12**	5	
	Blanco	1.2	2.5	20	**9.6**	8	320
				30	**7.2**	6	240
		2.4	2.5	20	**9.6**	4	320

Tabla 1: *Limitaciones de disposiciones*

- Véanse Fig. 3a y 3b para las conexiones a realizar en NODO-MASTER para cada uno de los diseños mencionados anteriormente.

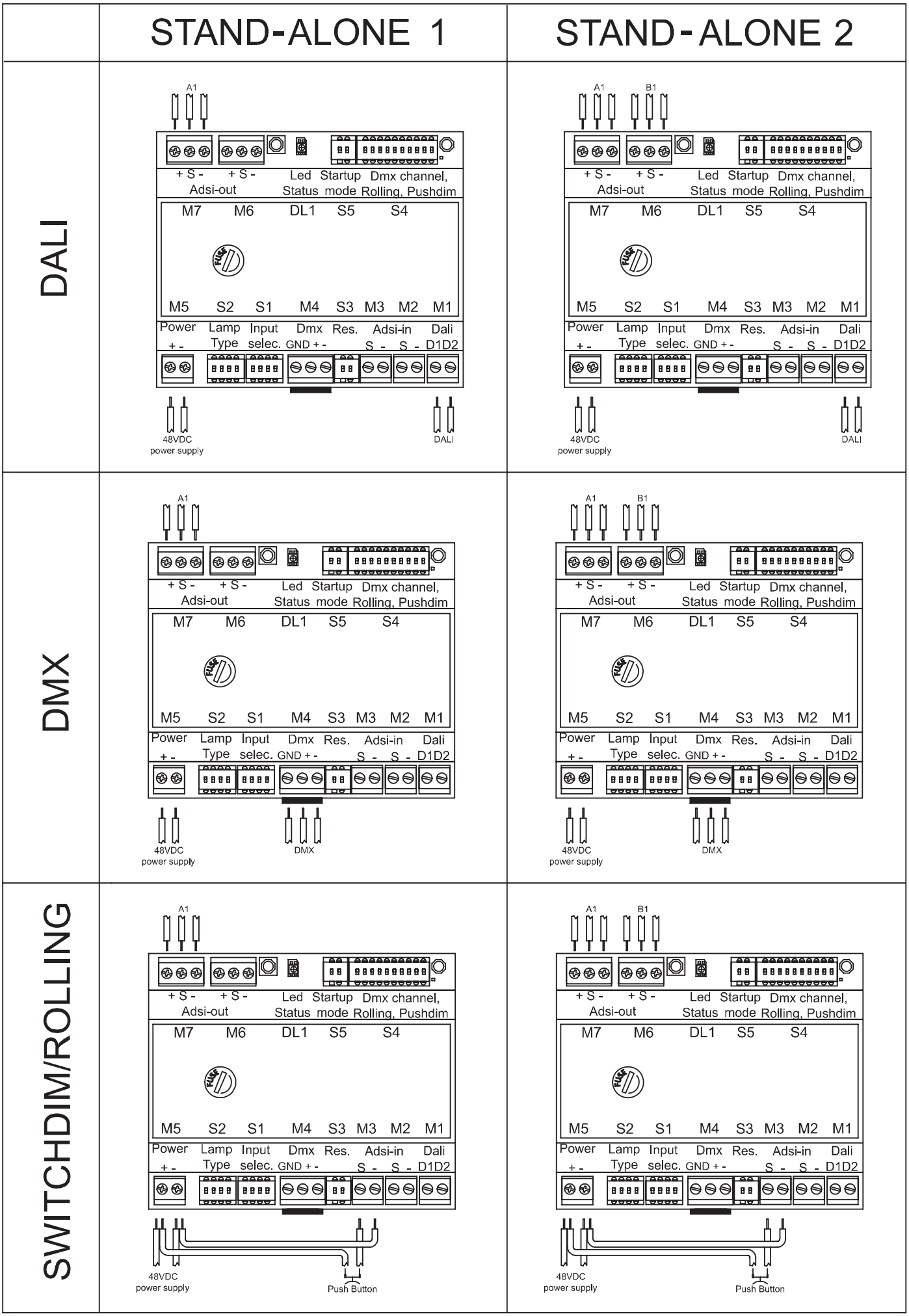


Fig. 3a: *Conexiones del Nodo-Master en modo «Stand-alone 1» y «Stand-alone 2»*
(véanse 6.2, 7.2, 8.2, 9.2 y 10.2 para ajustes de interruptores DIP)

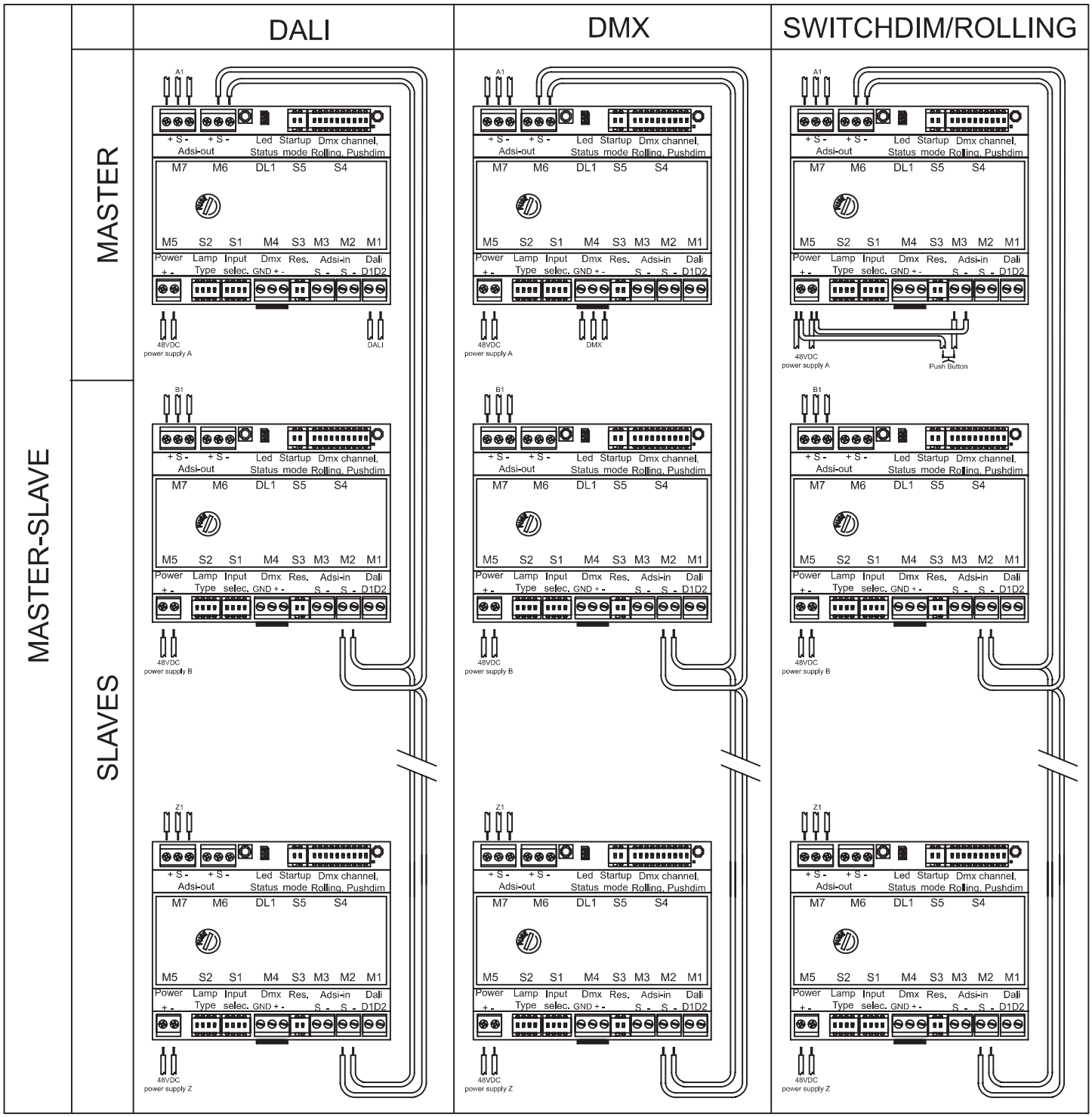


Fig. 3b: *Conexiones del Nodo-Master en modo «Maestro-Esclavo»*
(véanse 6.2, 7.2, 8.2, 9.2 y 10.2 para ajustes de interruptores DIP)

3 – FUSIBLES

Existe un fusible retardado 10A (T10) Ø5 x 20 mm en el panel central del NODO-MASTER, para la protección de la línea de alimentación de los aparatos.

4 – ALIMENTACIÓN ELÉCTRICA

En su catálogo, Artemide aconseja usar suministro eléctrico de tensión constante, según las restricciones del medio y de potencia de las secciones (V_{OUT} = 48VDC, máx 480W).

NB: Artemide declina toda responsabilidad por el uso de suministros eléctricos no certificados por Artemide.

5 – CARACTERÍSTICAS DE LOS CABLES

Por favor consultar Fig. 4.

Del suministro eléctrico al NODO-MASTER (bloque terminal M5): usar cables compatibles con el medio de instalación. Hacer esta conexión lo más corta posible, usar como mínimo 2 x 2.5 mm². Si fuera posible, usar cables ya integrados en el suministro eléctrico, si ya existiesen.

Desde NODO-MASTER (bloques terminales M6 y M7) al 1er dispositivo de la sección: si existe, usar el código anticipado en el catálogo (ej. Algoritmo Integrado en Superficie, 3 x 0,75 mm²).
En caso contrario usar un cable de 3 polos, compatible con la instalación y el medio. Esta conexión de cable debe realizarse tan corta como fuera posible, la sección mínima de cable aconsejable es 3 x 15 mm² (mejor 3 x 2.5 mm²). Respetar la polaridad "+", "-", "S" que aparece en el cable y en los bloques del terminal.

Del bus DALI a NODO-MASTER (Bloque terminal M1): calcular la distancia máxima entre la unidad de control de Dali (ej. panel táctil, Controlador de Grupo, Controlador de Escena,...) y el dispositivo de mayor accionamiento, inclusive NODO-MASTER: usar secciones de cables mayores a 0,5 mm² para distancia de hasta 100 m, mayores de 0,75 mm² para distancias hasta 150m, mayores de 1,5 mm² para distancias superiores. La distancia máxima no puede exceder de 300 m. El bus DALI no está polarizado.

Del bus DMX al NODO-MASTER (bloque terminal M4, sólo para NODO-MASTER DMX): usar un cable par trenzado, p. ej. cable CAT5. Realizar la conexión como se muestra en uno de los dos esquemas en Fig. 5. Respetar la polaridad «GND», «+», «-».
Conexiones para el diseño «maestro-esclavo» entre bloques terminales M2 y M6: usar mínimo 2 x 0.5 mm², conectar polos «-» y «S» en M6 o M7 de NODO-MASTER «Maestro» a los polos iguales de M2 o M3 de NODO-MASTER «Esclavo», respetando la polaridad.

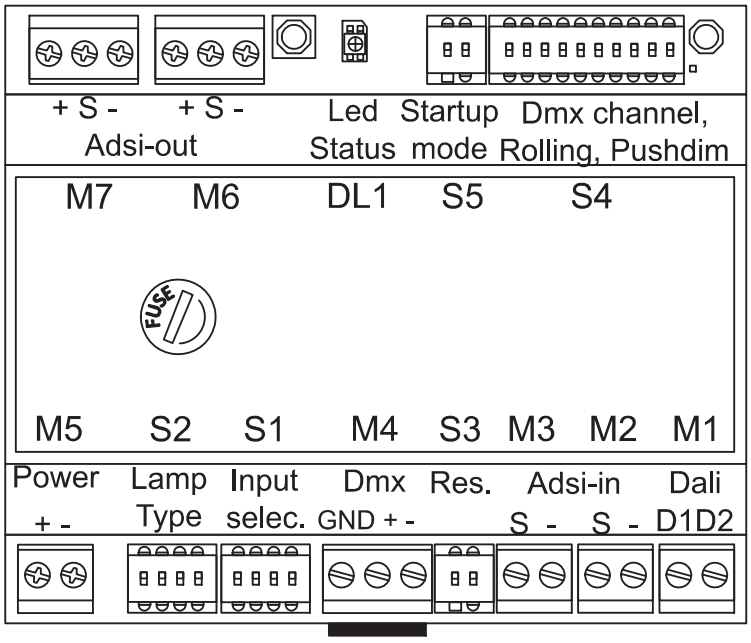


Fig. 4: *Diseño de los bloques terminales del Nodo-Master*
(véanse 6.2, 7.2, 8.2, 9.2 y 10.2 para ajustes de interruptores DIP)

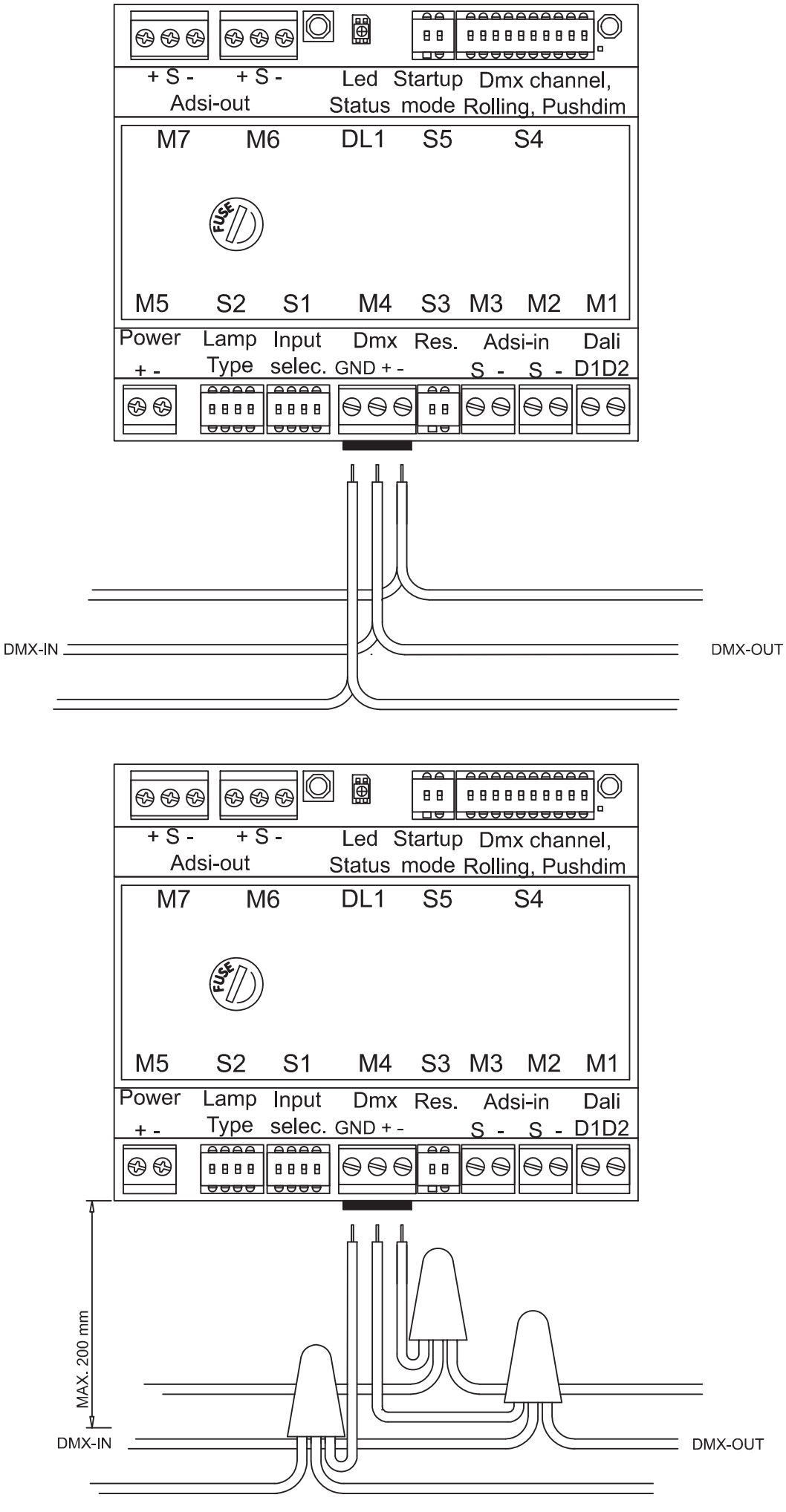


Fig. 5: *Conexiones del bus DMX*

6 – CONFIGURACIÓN NODO-MASTER A MODO “DALI”

6-1 - CONEXIONES

Usar cables como se muestra en párrafo 5. Consultar Fig. 3a y 3b.
Conectar cables de bus DALI a bloque terminal M1.
Conectar cables de alimentación del suministro eléctrico a bloque terminal M5, respetando la polaridad.
Conectar el cable a las luminarias del bloque terminal M6, respetando la polaridad.
En caso de un diseño «Maestro-Esclavo», conectar «-» y «S» en M7 de NODO-MASTER DALI «Maestro» y «S» de NODO-MASTER «Esclavo», respetando la polaridad, Fig. 3b.

6.2 - CONFIGURACIONES DE INTERRUPTORES DIP PARA MODO DALI

Por favor consultar Fig. 6.

Para configurar el tipo de bus, ubicar los interruptores dip S1. Para ajustar bus DALI:
S1-1: OFF
S1-2: ON
S1-3: OFF
S1-4: OFF

Para configurar el número de direcciones reservadas en el bus, ubicar los interruptores dip S2:

- Si en una sección conectada al NODO-MASTER bajo configuración sólo tiene aparatos directos de RGB (rojo, verde y azul), NODO-MASTER DALI ocupa 3 direcciones. Configurar interruptores dip S2 como se indica a continuación:
  S2-1: ON
  S2-2: OFF
  S2-3: OFF
  S2-4: OFF

- Si una sección conectada al NODO-MASTER bajo configuración sólo tiene aparatos directos monocromáticos (sólo blanco, sólo rojo, sólo verde, sólo azul, sólo ámbar), NODO-MASTER DALI ocupa 1 dirección. Configurar interruptores dip S2 como se indica a continuación:
  S2-1: OFF
  S2-2: ON
  S2-3: OFF
  S2-4: OFF

- Si en la sección conectada al NODO-MASTER bajo configuración sólo tiene aparatos RGB y/o monocromáticos y/o de diferente tipología (directos e indirectos), configurar los interruptores dip S2 según la situación real, NODO-MASTER ocupa N direcciones según la Tabla 2 adjunta (donde ON = aparatos presentes, OFF= aparatos NO presentes):

Total de direcciones ocupadas	S2-1 (RGB DIRECTO)	S2-2 (MONOCROMO DIRECTO)	S2-3 (RGB INDIRECTO)	S2-4 (MONOCROMO INDIRECTO)
1	OFF	ON	OFF	OFF
1	OFF	OFF	OFF	ON
2	OFF	ON	OFF	ON
3	ON	OFF	OFF	OFF
3	OFF	OFF	ON	OFF
4	ON	ON	OFF	OFF
4	OFF	OFF	ON	ON
4	ON	OFF	OFF	ON
4	OFF	ON	ON	OFF
6	ON	OFF	ON	OFF
7	ON	ON	ON	OFF
7	ON	OFF	ON	ON
8	ON	ON	ON	ON

Tabla 2: *Ajustes de interruptores dip S2*

NB: debido al número limitado de direcciones (64) que se pueden gestionar mediante el protocolo DALI, se aconseja configurar siempre el número mínimo de direcciones, compatibles con los requisitos del diseño.

S3 y S4 no tienen uso bajo el modo NODO-MASTER DALI.

6.3 - GESTIÓN DE PLANTAS COMPLEJAS Y DIRECCIONES

Suponiendo que existan dos secciones, cada una de ellas conectada a NODO-MASTER DALI, y que sea necesario sincronizar los colores de ambas secciones. Si las dos secciones se encuentran lejos entre ellas, y por tanto es difícil usar un diseño «maestro-esclavo», es necesario agrupar las direcciones DALI mediante los «controladores de grupo» en «grupos» (máximo 16), como se prevé en el estándar DALI.

Por ejemplo, en un caso simple de aparatos sólo RGB, podríamos tener (por favor observe que el número de direcciones puede verse sólo usando la interfaz de DALI-PC o en algún Panel de Control DALI):

NODO-MASTER DALI Nº 1:
R = dirección nº 1
G = dirección nº 2
B = dirección nº 3

NODO-MASTER DALI Nº 2:
R = dirección nº 4
G = dirección nº 5
B = dirección nº 6

Siguiendo el Controlador de Grupo específico (o Panel de Control), añadir cada dirección al grupo DALI adecuado:
Grupo 1 (ROJO): dirección nº 1, dirección nº 4
Grupo 2 (VERDE): dirección nº 2, dirección nº 5
Grupo 3 (AZUL): dirección nº 3, dirección nº 6.

Los 3 grupos serán gestionados mediante escenarios (máx 16) de conformidad con el estándar DALI, usando «controladores de escenarios». Varios escenarios pueden llamarse «secuencias», si se anticipa por el Panel de Control DALI utilizado.

Debido a que el protocolo DALI asigna direcciones de un modo aleatorio a los dispositivos encontrados en el bus (inclusive NODO-MASTER), podría suceder que las direcciones asignadas a un NODO-MASTER no sean contiguas y /o en el orden deseado.

En tal caso, podríamos encontrar, tomando el mismo ejemplo anterior:

NODO-MASTER DALI Nº 1:
R = dirección nº 6
G = dirección nº 2
B = dirección nº 3

NODO-MASTER DALI Nº 2:
R = dirección nº 1
G = dirección nº 4
B = dirección nº 5

En este caso, añadir direcciones DALI a grupos DALI como se indica a continuación:
Grupo 1 (ROJO): dirección nº 6, dirección nº 1
Grupo 2 (VERDE): dirección nº 2, dirección nº 4
Grupo 3 (AZUL): dirección nº 3, dirección nº 5.

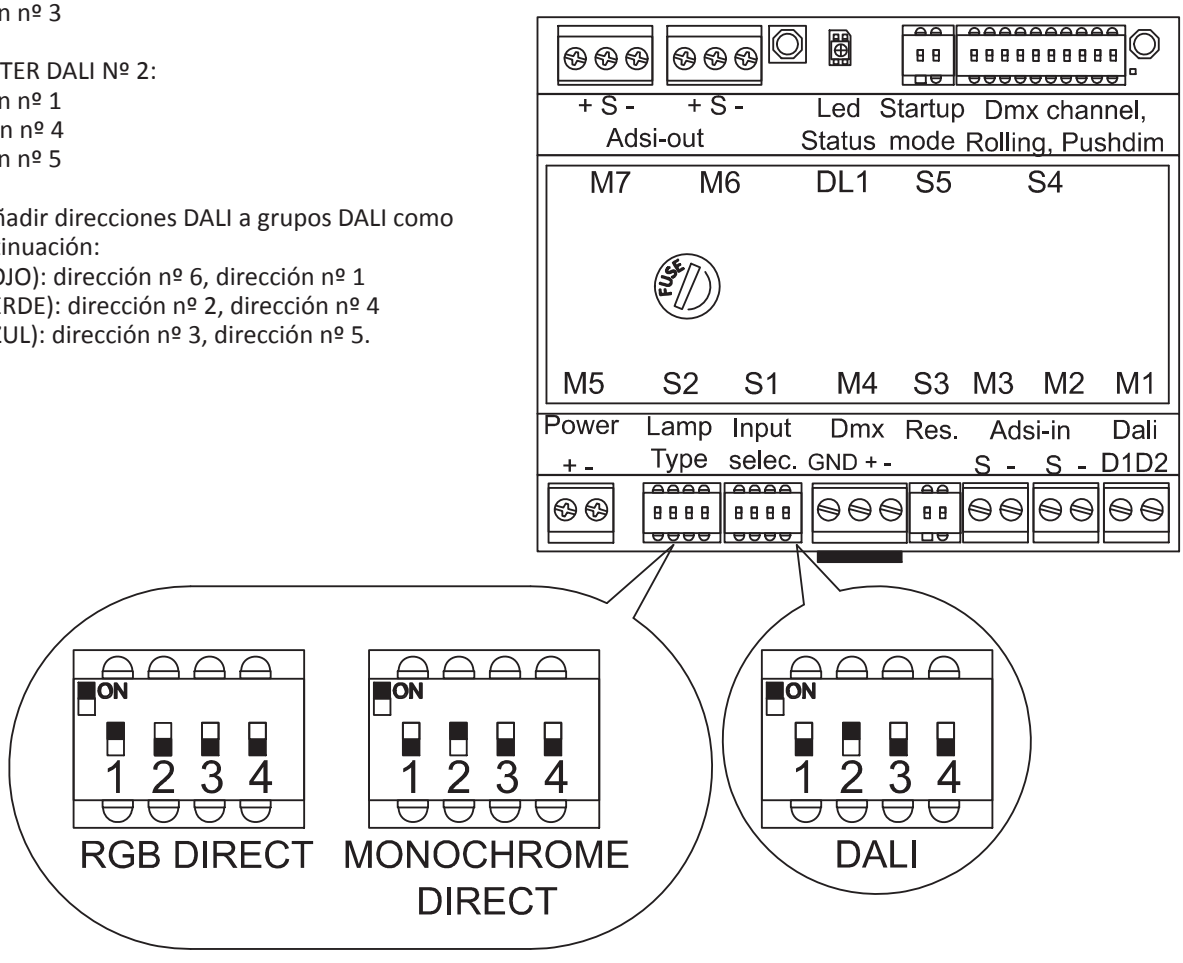


Fig. 6: *Ajustes de interruptores dip S2 en modo «Dali», Véase también Tabla 2 en capítulo 6.2 sobre otras combinaciones de luminarias*

7 – CONFIGURACIÓN NODO-MASTER A MODO «DMX»

7-1 - CONEXIONES

Usar cables como se muestra en párrafo 5. Consultar Fig. 3a y 3b.
Conectar cables del bus DMX a bloque terminal M4, respetando la polaridad. Usar una de las dos formas indicadas en fig. 5.
Conectar cables de alimentación del suministro eléctrico a bloque terminal M5, respetando la polaridad.
Conectar el cable a las luminarias del bloque terminal M6, respetando la polaridad.
En caso de un diseño «Maestro-Esclavo», conectar «-» y «S» en M7 de NODO-MASTER DMX «Maestro» y «S» de NODO-MASTER «Esclavo», respetando la polaridad, fig. 3b.

7.2 - CONFIGURACIONES DE INTERRUPTORES DIP PARA MODO DMX

Por favor consultar Fig. 7.

Para configurar el tipo de bus, ubicar los interruptores dip S1. Para ajustar bus DMX:
S1-1: ON
S1-2: OFF
S1-3: OFF
S1-4: OFF

Para configurar el número de direcciones reservadas en el bus, ubicar los interruptores dip S2:
- Si en una sección conectada al NODO-MASTER bajo configuración sólo tiene aparatos directos RGB, NODO-MASTER DMX ocupa 3 direcciones. Configurar interruptores dip S2 como se indica a continuación:
  S2-1: ON
  S2-2: OFF
  S2-3: OFF
  S2-4: OFF

- Si una sección conectada al NODO-MASTER bajo configuración sólo tiene aparatos directos monocromáticos (sólo blanco, sólo rojo, sólo verde, sólo azul, sólo ámbar), NODO-MASTER DMX ocupa 1 dirección. Configurar interruptores dip S2 como se indica a continuación:
  S2-1: OFF
  S2-2: ON
  S2-3: OFF
  S2-4: OFF.

- Si en la sección conectada al NODO-MASTER bajo configuración sólo tiene aparatos RGB y/o monocromáticos y/o de diferente tipología (directos e indirectos), configurar los interruptores dip S2 según la situación real, NODO-MASTER DMX ocupa N direcciones según la tabla 2 adjunta (donde ON = aparatos presentes, OFF= aparatos NO presentes).

Para activar la resistencia final interna de DMX, ubicar los interruptores dip S3.
De conformidad al estándar DMX, el último dispositivo conectado al bus DMX debe tener una resistencia 120 Ω entre su «+» y «-».
Esta resistencia puede activarse internamente en NODO-MASTER DMX mediante la configuración S3-1 encendida.

Para ajustar la dirección DMX, ubicar los interruptores dip S4.
En un bus DMX, cada dispositivo debe tener una dirección única entre el 1 y el 511.
Según el número de direcciones ocupadas por un NODO-MASTER DMX (véase valor del interruptor dip S2 en tabla nº 2), escoger una dirección libre para cada NODO-MASTER DMX, y asignarlo usando los interruptores dip S4.
Se usan los interruptores de S4-1 a S4-9 para seleccionar la dirección de inicio de DMX ocupada por NODO-MASTER DMX. Véase la siguiente Tabla nº 3 usando el código binario; 0 = OFF, 1 = ON.

Dirección	N° de interruptor DIP									
DMX	10	9	8	7	6	5	4	3	2	1
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
2	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
3	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
4	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
5	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
6	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF
7	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
8	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
9	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
10	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF
11	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
12	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
13	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
14	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
15	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON
16	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
17	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
18	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF
19	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
20	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
21	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
22	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
23	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON
24	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
25	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
26	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF
27	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON
28	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
29	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON
30	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF
31	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON
32	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
33	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
34	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
35	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
36	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
37	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
38	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
39	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON
40	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
41	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
42	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF
43	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON
44	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
45	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON
46	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF
47	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON
48	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
49	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
50	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF
51	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON
52	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
53	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON
54	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF
55	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON
56	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
57	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON
58	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF
59	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON
60	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF
61	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON
62	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF
63	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON

Dirección	N° de interruptor DIP									
DMX	10	9	8	7	6	5	4	3	2	1
64	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
65	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
66	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF
67	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON
68	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
69	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
70	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF
71	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON
72	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
73	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON
74	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF
75	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON
76	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
77	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON
78	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF
79	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON
80	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
81	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON
82	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF
83	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON
84	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
85	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON
86	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF
87	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON
88	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
89	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON
90	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF
91	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON
92	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF
93	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON
94	OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF
95	OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON	ON
96	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
97	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON
98	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF
99	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON
100	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
101	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON
102	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF
103	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON
104	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
105	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON
106	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF
107	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON
108	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF
109	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON
110	OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF
111	OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON	ON
112	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
113	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON
114	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF
115	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON
116	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF
117	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON
118	OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF
119	OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON	ON
120	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF
121	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON
122	OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF
123	OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON	ON
124	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF
125	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF	ON
126	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF
127	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON

Tabla 3-1: *Configuración de dirección DMX*

Dirección DMX	N° de interruptor DIP									
	10	9	8	7	6	5	4	3	2	1
128	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
129	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
130	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF
131	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON
132	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
133	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON
134	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF
135	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON
136	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
137	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON
138	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF
139	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON
140	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
141	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON
142	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF
143	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON
144	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
145	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON
146	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF
147	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON
148	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
149	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON
150	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF
151	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON
152	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
153	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON
154	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF
155	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON
156	OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF
157	OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON
158	OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF
159	OFF	OFF	ON	OFF	OFF	ON	ON	ON	ON	ON
160	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
161	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON
162	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF
163	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON
164	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
165	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON
166	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF
167	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON
168	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
169	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON
170	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF
171	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON
172	OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF
173	OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON
174	OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF
175	OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON	ON
176	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
177	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON
178	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF
179	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON
180	OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF
181	OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON
182	OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF
183	OFF	OFF	ON	OFF	ON	ON	OFF	ON	ON	ON
184	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF
185	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON
186	OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF
187	OFF	OFF	ON	OFF	ON	ON	ON	OFF	ON	ON
188	OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF
189	OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF	ON
190	OFF	OFF	ON	OFF	ON	ON	ON	ON	ON	OFF
191	OFF	OFF	ON	OFF	ON	ON	ON	ON	ON	ON

Dirección DMX	N° de interruptor DIP									
	10	9	8	7	6	5	4	3	2	1
192	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
193	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
194	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF
195	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON
196	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
197	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON
198	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF
199	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON
200	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
201	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON
202	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF
203	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON
204	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF
205	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON
206	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF
207	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON	ON
208	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
209	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON
210	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF
211	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON
212	OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF
213	OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON
214	OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF
215	OFF	OFF	ON	ON	OFF	ON	OFF	ON	ON	ON
216	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF
217	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON
218	OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF
219	OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON	ON
220	OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF
221	OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF	ON
222	OFF	OFF	ON	ON	OFF	ON	ON	ON	ON	OFF
223	OFF	OFF	ON	ON	OFF	ON	ON	ON	ON	ON
224	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
225	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON
226	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF
227	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON
228	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF
229	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON
230	OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF
231	OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON	ON
232	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF
233	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON
234	OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF
235	OFF	OFF	ON	ON	ON	OFF	ON	OFF	ON	ON
236	OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF
237	OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF	ON
238	OFF	OFF	ON	ON	ON	OFF	ON	ON	ON	OFF
239	OFF	OFF	ON	ON	ON	OFF	ON	ON	ON	ON
240	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF
241	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON
242	OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF
243	OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON	ON
244	OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF
245	OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF	ON
246	OFF	OFF	ON	ON	ON	ON	OFF	ON	ON	OFF
247	OFF	OFF	ON	ON	ON	ON	OFF	ON	ON	ON
248	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF
249	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF	ON
250	OFF	OFF	ON	ON	ON	ON	ON	OFF	ON	OFF
251	OFF	OFF	ON	ON	ON	ON	ON	OFF	ON	ON
252	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF
253	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF	ON
254	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	OFF
255	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	ON

Tabla 3-2: *Configuración de dirección DMX*

Dirección DMX	N° de interruptor DIP									
	10	9	8	7	6	5	4	3	2	1
256	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
257	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
258	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
259	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
260	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
261	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
262	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF
263	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
264	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
265	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
266	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF
267	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
268	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
269	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
270	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
271	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON
272	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
273	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
274	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF
275	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
276	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
277	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
278	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
279	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	ON	ON
280	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
281	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
282	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON	OFF
283	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	ON	ON
284	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
285	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF	ON
286	OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON	OFF
287	OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON	ON
288	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
289	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
290	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
291	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
292	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
293	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
294	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
295	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON	ON
296	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
297	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
298	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON	OFF
299	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON	ON
300	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
301	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF	ON
302	OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON	OFF
303	OFF	ON	OFF	OFF	ON	OFF	ON	ON	ON	ON
304	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
305	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
306	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON	OFF
307	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON
308	OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
309	OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF	ON
310	OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON	OFF
311	OFF	ON	OFF	OFF	ON	ON	OFF	ON	ON	ON
312	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
313	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF	ON
314	OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON	OFF
315	OFF	ON	OFF	OFF	ON	ON	ON	OFF	ON	ON
316	OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF	OFF
317	OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF	ON
318	OFF	ON	OFF	OFF	ON	ON	ON	ON	ON	OFF
319	OFF	ON	OFF	OFF	ON	ON	ON	ON	ON	ON

Dirección DMX	N° de interruptor DIP									
	10	9	8	7	6	5	4	3	2	1
320	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
321	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
322	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF
323	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	ON
324	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
325	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
326	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON	OFF
327	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	ON	ON
328	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
329	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	ON
330	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON	OFF
331	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON	ON
332	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
333	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF	ON
334	OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON	OFF
335	OFF	ON	OFF	ON	OFF	OFF	ON	ON	ON	ON
336	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
337	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	ON
338	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON	OFF
339	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	ON	ON
340	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
341	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON
342	OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON	OFF
343	OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON	ON
344	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
345	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF	ON
346	OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON	OFF
347	OFF	ON	OFF	ON	OFF	ON	ON	OFF	ON	ON
348	OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF	OFF
349	OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF	ON
350	OFF	ON	OFF	ON	OFF	ON	ON	ON	ON	OFF
351	OFF	ON	OFF	ON	OFF	ON	ON	ON	ON	ON
352	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
353	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	ON
354	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON	OFF
355	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	ON	ON
356	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
357	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	ON
358	OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON	OFF
359	OFF	ON	OFF	ON	ON	OFF	OFF	ON	ON	ON
360	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
361	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF	ON
362	OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON	OFF
363	OFF	ON	OFF	ON	ON	OFF	ON	OFF	ON	ON
364	OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF	OFF
365	OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF	ON
366	OFF	ON	OFF	ON	ON	OFF	ON	ON	ON	OFF
367	OFF	ON	OFF	ON	ON	OFF	ON	ON	ON	ON
368	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
369	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF	ON
370	OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON	OFF
371	OFF	ON	OFF	ON	ON	ON	OFF	OFF	ON	ON
372	OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF	OFF
373	OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF	ON
374	OFF	ON	OFF	ON	ON	ON	OFF	ON	ON	OFF
375	OFF	ON	OFF	ON	ON	ON	OFF	ON	ON	ON
376	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF	OFF
377	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF	ON
378	OFF	ON	OFF	ON	ON	ON	ON	OFF	ON	OFF
379	OFF	ON	OFF	ON	ON	ON	ON	OFF	ON	ON
380	OFF	ON	OFF	ON	ON	ON	ON	ON	OFF	OFF
381	OFF	ON	OFF	ON	ON	ON	ON	ON	OFF	ON
382	OFF	ON	OFF	ON	ON	ON	ON	ON	ON	OFF
383	OFF	ON	OFF	ON	ON	ON	ON	ON	ON	ON

Tabla 3-3: *Configuración de dirección DMX*

Dirección DMX	N° de interruptor DIP									
	10	9	8	7	6	5	4	3	2	1
384	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
385	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
386	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF
387	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	ON
388	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
389	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	ON
390	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON	OFF
391	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON
392	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
393	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	ON
394	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON	OFF
395	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	ON	ON
396	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
397	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	ON
398	OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON	OFF
399	OFF	ON	ON	OFF	OFF	OFF	ON	ON	ON	ON
400	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
401	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	ON
402	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON	OFF
403	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	ON	ON
404	OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
405	OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF	ON
406	OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON	OFF
407	OFF	ON	ON	OFF	OFF	ON	OFF	ON	ON	ON
408	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
409	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON
410	OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON	OFF
411	OFF	ON	ON	OFF	OFF	ON	ON	OFF	ON	ON
412	OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF	OFF
413	OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF	ON
414	OFF	ON	ON	OFF	OFF	ON	ON	ON	ON	OFF
415	OFF	ON	ON	OFF	OFF	ON	ON	ON	ON	ON
416	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
417	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	ON
418	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON	OFF
419	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON	ON
420	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
421	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF	ON
422	OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON	OFF
423	OFF	ON	ON	OFF	ON	OFF	OFF	ON	ON	ON
424	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
425	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF	ON
426	OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON	OFF
427	OFF	ON	ON	OFF	ON	OFF	ON	OFF	ON	ON
428	OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF	OFF
429	OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF	ON
430	OFF	ON	ON	OFF	ON	OFF	ON	ON	ON	OFF
431	OFF	ON	ON	OFF	ON	OFF	ON	ON	ON	ON
432	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
433	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF	ON
434	OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON	OFF
435	OFF	ON	ON	OFF	ON	ON	OFF	OFF	ON	ON
436	OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF	OFF
437	OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF	ON
438	OFF	ON	ON	OFF	ON	ON	OFF	ON	ON	OFF
439	OFF	ON	ON	OFF	ON	ON	OFF	ON	ON	ON
440	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF	OFF
441	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF	ON
442	OFF	ON	ON	OFF	ON	ON	ON	OFF	ON	OFF
443	OFF	ON	ON	OFF	ON	ON	ON	OFF	ON	ON
444	OFF	ON	ON	OFF	ON	ON	ON	ON	OFF	OFF
445	OFF	ON	ON	OFF	ON	ON	ON	ON	OFF	ON
446	OFF	ON	ON	OFF	ON	ON	ON	ON	ON	OFF
447	OFF	ON	ON	OFF	ON	ON	ON	ON	ON	ON

Dirección DMX	N° de interruptor DIP									
	10	9	8	7	6	5	4	3	2	1
448	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
449	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
450	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON	OFF
451	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON
452	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
453	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF	ON
454	OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON	OFF
455	OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON	ON
456	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
457	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF	ON
458	OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON	OFF
459	OFF	ON	ON	ON	OFF	OFF	ON	OFF	ON	ON
460	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF
461	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF	ON
462	OFF	ON	ON	ON	OFF	OFF	ON	ON	ON	OFF
463	OFF	ON	ON	ON	OFF	OFF	ON	ON	ON	ON
464	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
465	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF	ON
466	OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON	OFF
467	OFF	ON	ON	ON	OFF	ON	OFF	OFF	ON	ON
468	OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF	OFF
469	OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF	ON
470	OFF	ON	ON	ON	OFF	ON	OFF	ON	ON	OFF
471	OFF	ON	ON	ON	OFF	ON	OFF	ON	ON	ON
472	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF	OFF
473	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF	ON
474	OFF	ON	ON	ON	OFF	ON	ON	OFF	ON	OFF
475	OFF	ON	ON	ON	OFF	ON	ON	OFF	ON	ON
476	OFF	ON	ON	ON	OFF	ON	ON	ON	OFF	OFF
477	OFF	ON	ON	ON	OFF	ON	ON	ON	OFF	ON
478	OFF	ON	ON	ON	OFF	ON	ON	ON	ON	OFF
479	OFF	ON	ON	ON	OFF	ON	ON	ON	ON	ON
480	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
481	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON
482	OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON	OFF
483	OFF	ON	ON	ON	ON	OFF	OFF	OFF	ON	ON
484	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF	OFF
485	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF	ON
486	OFF	ON	ON	ON	ON	OFF	OFF	ON	ON	OFF
487	OFF	ON	ON	ON	ON	OFF	OFF	ON	ON	ON
488	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF	OFF
489	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF	ON
490	OFF	ON	ON	ON	ON	OFF	ON	OFF	ON	OFF
491	OFF	ON	ON	ON	ON	OFF	ON	OFF	ON	ON
492	OFF	ON	ON	ON	ON	OFF	ON	ON	OFF	OFF
493	OFF	ON	ON	ON	ON	OFF	ON	ON	OFF	ON
494	OFF	ON	ON	ON	ON	OFF	ON	ON	ON	OFF
495	OFF	ON	ON	ON	ON	OFF	ON	ON	ON	ON
496	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF
497	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF	ON
498	OFF	ON	ON	ON	ON	ON	OFF	OFF	ON	OFF
499	OFF	ON	ON	ON	ON	ON	OFF	OFF	ON	ON
500	OFF	ON	ON	ON	ON	ON	OFF	ON	OFF	OFF
501	OFF	ON	ON	ON	ON	ON	OFF	ON	OFF	ON
502	OFF	ON	ON	ON	ON	ON	OFF	ON	ON	OFF
503	OFF	ON	ON	ON	ON	ON	OFF	ON	ON	ON
504	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF
505	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF	ON
506	OFF	ON	ON	ON	ON	ON	ON	OFF	ON	OFF
507	OFF	ON	ON	ON	ON	ON	ON	OFF	ON	ON
508	OFF	ON	ON	ON	ON	ON	ON	ON	OFF	OFF
509	OFF	ON	ON	ON	ON	ON	ON	ON	OFF	ON
510	OFF	ON	ON	ON	ON	ON	ON	ON	ON	OFF
511	OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON

Tabla 3-4: *Configuración de dirección DMX*

NB: por favor observe que el interruptor dip S4, nº 1 está en la derecha, 10 en la izquierda y que el Encendido ¡está en el lado inferior!

NB: observe que:

Dirección DMX	N° de interruptor DIP									
	10	9	8	7	6	5	4	3	2	1
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON

ambos en relación a la dirección nº 1.

NB: S4-10 no se usa, y debe configurarse siempre en OFF.

Ejemplo:
NODO-MASTER DMX Nº 1 configurado en RGB DIRECTO, NODO-MASTER DMX Nº 2 configurado en MONOCROMÁTICO DIRECTO, NODO-MASTER DMX Nº 3 configurado en MONOCROMÁTICO INDIRECTO:

NODO-MASTER DMX Nº 1
S4 está configurado p.ej. en dirección nº 5, por tanto ON-OFF-ON-OFF-OFF-OFF-OFF-OFF-OFF-OFF
S2 está configurado: ON-OFF-OFF-OFF, usa 3 direcciones

NODO-MASTER DMX Nº 2
S4 debe configurarse en la dirección nº 8 (NODO-MASTER DMX Nº1 valor S4 + NODO-MASTER DMX Nº1 valor S2).
Por tanto S4 está configurado: OFF-OFF-OFF-ON-OFF-OFF-OFF-OFF-OFF-OFF
S2 está configurado: OFF-ON-OFF-OFF, usa 1 dirección

NODO-MASTER DMX Nº 3
S4 debe estar configurado en la dirección nº 9 (NODO-MASTER DMX Nº2 valor S4 + NODO-MASTER DMX Nº 2 valor S2).
Por tanto S4 está configurado: ON-OFF-OFF-ON-OFF-OFF-OFF-OFF-OFF-OFF
S2 está configurado: OFF-OFF-OFF-ON, usa 1 dirección

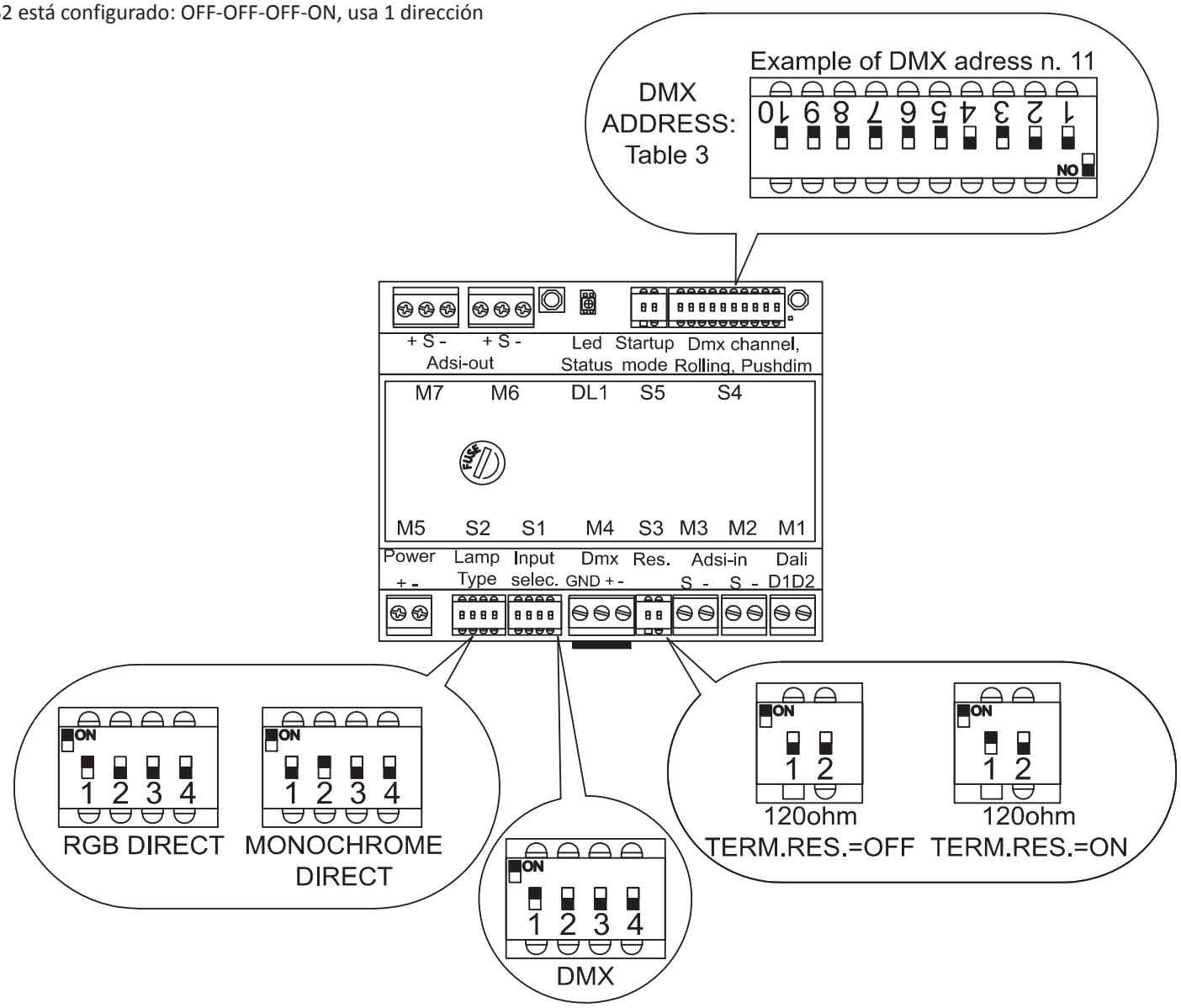


Fig. 7: *Ajustes de interruptores dip en modo «DMX» (Véase también la Tabla 2 en capítulo 6.2 S2 para combinaciones diferentes de luminarias y Tabla 3 en capítulo 7.2 para direcciones DMX)*

8 – CONFIGURACIÓN NODO-MASTER A MODO “ESCLAVO”

8-1 - CONEXIONES

Usar cables como se muestra en párrafo 5. Consultar Fig. 3b.
Conectar cables de alimentación del suministro eléctrico a bloque terminal M5, respetando la polaridad.
Conectar el cable a las luminarias del bloque terminal M6, respetando la polaridad.
Conectar «-» y «S» en M7 de NODO-MASTER «Maestro» a «-» y «S» de NODO-MASTER «Esclavo», respetando la polaridad.
Con NODO-MASTER «esclavo» NO conectar M1 a bus DALI o M4 a bus DMX.

8.2 - CONFIGURACIONES DE INTERRUPTORES DIP PARA MODO ESCLAVO

Por favor consultar Fig. 8.

Para configurar el tipo de bus, ubicar los interruptores dip S1. Para ajustar ESCLAVO:

- S1-1: OFF
- S1-2: OFF
- S1-3: ON
- S1-4: OFF

Para configurar S2: copiar en NODO-MASTER «Esclavo» la configuración usada en NODO-MASTER «Maestro» a la cual NODO-MASTER «Esclavo» esté conectado. Las direcciones configuradas en NODO-MASTER como «Esclavo» NO están ocupadas en los buses DALI o DMX.

S3 y S4 no tienen uso bajo el modo NODO-MASTER «Esclavo».

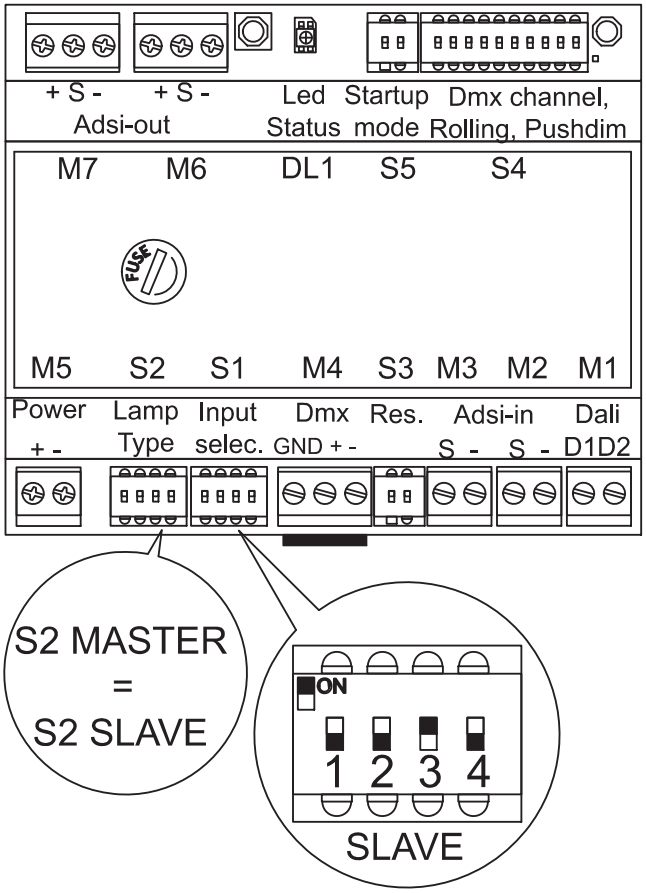


Fig. 8: *Ajustes de interruptores dip en modo «Esclavo»*

9 – CONFIGURACIÓN NODO-MASTER A MODO “ROLLING”

9.0 - INTRODUCCIÓN

El modo «ROLLING» puede usarse en instalaciones simples para guiar el sistema sin necesidad de tener un medio externo DALI o DMX.
En este modo de funcionamiento, es posible:

- Escoger los colores en los cuales quiere que realice la rotación: incluso si el sistema está compuesto de módulos RGB, es posible activar sólo los colores deseados que pertenecen al conjunto rodante (p. ej. en un sistema RGB es posible excluir VERDE y dejar que roten sólo ROJO y AZUL)
- Escoger la velocidad de rotación
- Mediante un botón pulsador es posible encender y apagar el sistema e iniciar o parar la rotación En este modo, NODO-MASTER auto-genera una secuencia de comando, necesaria para encender, apagar y regular la iluminación de todas las tipologías de los aparatos.

Dado que están presentes los siguientes «colores» en la sección y se activan correctamente mediante los interruptores dip S4, el orden usado durante la prueba es el siguiente:

Directo RGB, en el orden rojo, verde, azul
Directo Monocromático (blanco, rojo, verde, azul, ámbar)
Indirecto RGB, en el orden rojo, verde, azul
Indirecto Monocromático (blanco, rojo, verde, azul, ámbar).

El modo ROLLING también puede usarse para probar el sistema, antes de activar el medio DALI o DMX: si todos los módulos funcionan bien en modo rotatorio, la razón de que pudiese ocurrir una mala función tras la activación de DALI o DMX, tiene que buscarse en el bus DALI o DMX y/o dirección NODOMASTER.

9.1 - CONEXIONES

Usar cables como se muestra en párrafo 5. Consultar Fig. 3a y 3b.
Conectar cables del botón pulsador a los bloques terminales M3-M5.
NB: usar un botón pulsador abierto normalmente para realizar cortocircuito «+» en bloques terminales M3 y M5.
Conectar cables de alimentación del suministro eléctrico a bloque terminal M5, respetando la polaridad.
Conectar el cable a las luminarias del bloque terminal M6, respetando la polaridad.
En caso de un diseño «Maestro-Esclavo», conectar «-» y «S» en M7 de NODO-MASTER DMX «Maestro» y «S» de NODO-MASTER «Esclavo», respetando la polaridad, fig. 3b.

9.2 - CONFIGURACIONES DE INTERRUPTORES DIP PARA MODO ROLLING

Por favor consultar Fig. 9.

Para configurar el modo ROLLING, ubicar los interruptores dip S1, y configurarlos en cada NODO-MASTER autónomo o NODO-MASTER «Maestro» (NO configurar S1 en NODO-MASTER «Esclavo») como se indica a continuación:

S1-1: OFF
S1-2: OFF
S1-3: OFF
S1-4: ON.

NB: en este modo, sólo se reproducen las sincronizaciones entre NODO-MASTER «Maestro» y NODO-MASTER «Esclavo».

Si el MODO ROLLING se usa para probar el sistema antes de la instalación de DALI o DMX, las sincronizaciones entre distintos NODO-MASTER «Maestro» o distintos NODO-MASTER autónomos que se realizan mediante la agrupación DALI o DMX, NO se realizarán en modo ROLLING.

Para configurar los **canales que pertenecen al conjunto rotatorio**, ubicar los interruptores dip S4 y configurar los interruptores dip 1-8 según la siguiente Tabla 4. Cuando un número de interruptor dip «N» se configura en encendido, el canal «N» rodará.

NB: Por favor observe que si todos los interruptores dip están configurados para estar apagados, se configurará un modo de función especial, véase capítulo «CONFIGURACIÓN DE NODO-MASTER A MODO PUSHDIM».

	Interruptores DIP S4							
	S4-8	**S4-7**	**S4-6**	**S4-5**	**S4-4**	**S4-3**	**S4-2**	**S4-1**
	Indirecto Monocr.	Indirecto Azul	Indirecto Verde	Indirecto Rojo	Directo Monocr.	Directo Azul	Directo Verde	Directo Rojo
RGB Directo	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
Rojo Directo	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
Rojo, Azul Directo	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
RGB Directo, Monocromo Indirecto	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Verde, Azul Directo RGB Indirecto	OFF	ON	ON	ON	OFF	ON	ON	ON

Tabla 4: E*jemplos de ajustes de interruptores dip S4 en modo ROLLING para escoger colores que pertenezcan al conjunto rotatorio*

Para configurar la **velocidad de rotación**, ubicar los interruptores dip S4 y configurar los interruptores dip 9-10 según la siguiente Tabla 5.

Velocidad	**Interruptores DIP S4**	
	S4-10	**S4-9**
Muy lento	OFF	OFF
Lento	OFF	ON
Medio	ON	OFF
Rápido	ON	ON

Tabla 5: *Ajustes de interruptores dip S4 en modo ROLLING para escoger velocidad de rotación del conjunto rotatorio*

Configurar el modo **SWITCH-ON** (véase también a continuación 9.3): ubicar el interruptor dip S5 y configurar según tabla 6.

Modo SWITCH-ON	**Interruptores DIP S5**	
	S5-1	**S5-2**
Seguridad: el sistema permanece apagado tras una pérdida y restablecimiento de la red eléctrica	OFF	OFF
Interruptor de pared: el sistema restaura el último escenario guardado tras pérdida y restablecimiento de la red eléctrica	ON	OFF

Tabla 6: *Ajustes de interruptores dip S5 en modo ROLLING para escoger modo SWITCH-ON tras una pérdida y restablecimiento de la red eléctrica.*

NB: por favor observe que el significado de estos modos es:
- **Seguridad: dejar el sistema apagado de forma segura tras pérdida y restablecimiento de la red eléctrica**
- **Interruptor de pared: para poder encender y apagar el sistema mediante el interruptor de pared o el interruptor temporizador. El último escenario guardado se restaurará cuando el interruptor de pared o temporizador sea reactivado.**

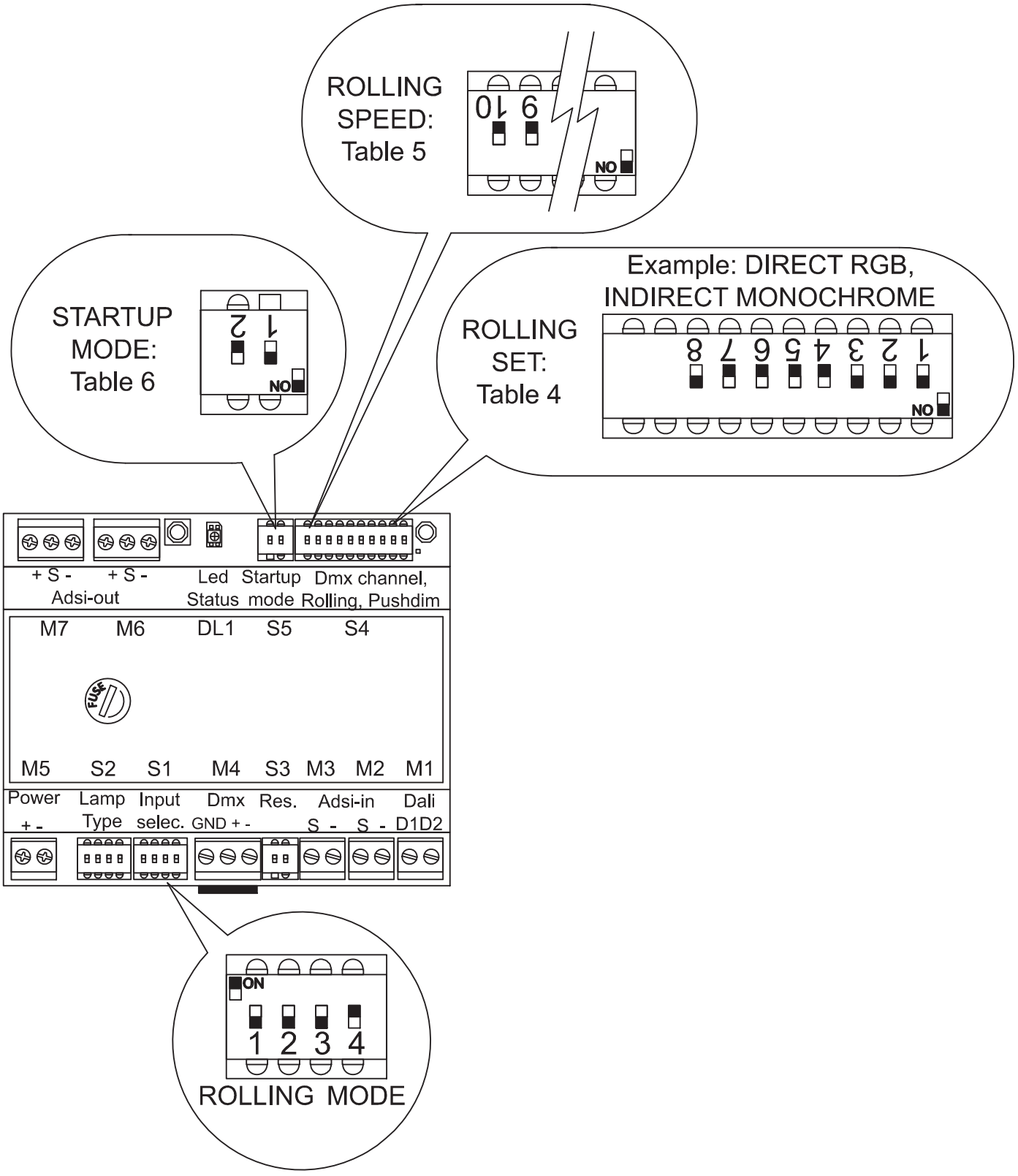


Fig. 9: *Ajustes de interruptores dip en modo "ROLLING»*

9.3 - FUNCIÓN DEL BOTÓN PULSADOR

El botón pulsador con el contacto abierto conectado de forma opcional a los bloques terminales M3-M5 puede usarse para:
- Encender y apagar el sistema mediante una pulsación «larga».
- Encender y apagar la rotación mediante una pulsación «corta».
- Por favor observe que **NO** es posible regular manualmente el sistema mediante una pulsación.
- En el caso que sea necesario accionar distintos NODO-MASTER con un mismo pulsador, conectar los distintos NODO-MASTER en configuración MASTER-SLAVE, ver Fig.3b y el capítulo 8. Conectar el botón pulsador con el contacto abierto al NODO-MASTER «Maestro».

Ejemplos de uso:
- **Comenzar modo rotatorio siempre al iniciar:**
  - Configurar «interruptor de pared» en interruptor dip S5.
  - Activar manualmente rotación mediante pulsación larga.
  - Luego desconectar de la corriente principal mediante el interruptor de pared o temporizador.
  - Cuando el interruptor de pared o temporizador se reactive, la rotación se iniciará de nuevo.

- **Activar una misma intensidad fija siempre al iniciar:**
  - Configurar «interruptor de pared» en interruptor dip S5.
  - Activar manualmente rotación mediante pulsación larga.
  - Esperar que el sistema alcance el escenario deseado.
  - Parar la rotación mediante una pulsación breve.
  - Desconectar de la corriente principal mediante el interruptor de pared o temporizador.
  - Cuando el interruptor de pared o temporizador se reactive, el escenario guardado se restaurará de nuevo.

10 – CONFIGURACIÓN NODO-MASTER A MODO “PUSHDIM”

10.0 - INTRODUCCIÓN

El modo «PUSHDIM» puede usarse en instalaciones simples para dirigir módulos MONOCROMÁTICOS sin necesidad de tener un medio externo DALI o DMX.
En este modo de funcionamiento, mediante un botón pulsador es posible:
- Encender y apagar el sistema.
- Regular manualmente la iluminación de los módulos monocromáticos.

En este modo, NODO-MASTER auto-genera una secuencia de comando, necesaria para encender, apagar y regular la iluminación de los aparatos monocromáticos.

Modo PUSHDIM puede ser activado sólo en módulos monocromáticos conectados al canal 4 (monocromático directo) u 8 (monocromático indirecto).

10.1 - CONEXIONES

Usar cables como se muestra en párrafo 5. Consultar Fig. 3a y 3b.
Conectar cables del botón pulsador a los bloques terminales M3-M5.
NB: usar un botón pulsador abierto normalmente para realizar cortocircuito «+» en bloques terminales M3 y M5.
Conectar cables de alimentación del suministro eléctrico a bloque terminal M5, respetando la polaridad.
Conectar el cable a las luminarias del bloque terminal M6, respetando la polaridad.
En caso de un diseño «Maestro-Esclavo», conectar «-» y «S» en M7 de NODO-MASTER DMX «Maestro» y «S» de NODO-MASTER «Esclavo», respetando la polaridad, fig. 3b.

10.2 - CONFIGURACIONES DE INTERRUPTORES DIP PARA MODO PUSHDIM

Por favor consultar Fig. 10.

Para configurar el modo PUSHDIM, ubicar los interruptores dip S1, y configurarlos en NODO-MASTER autónomo o NODO-MASTER «Maestro» (NO configurar S1 en NODO-MASTER «Esclavo») como se indica a continuación:
S1-1: OFF
S1-2: OFF
S1-3: OFF
S1-4: ON.

NB: en este modo, sólo se reproducen las sincronizaciones entre NODO-MASTER «Maestro» y NODO-MASTER «Esclavo».

Configurar interruptor dip S4 para activar modo PUSHDIM, véase Tabla 7.

	Interruptores DIP S4							
	S4-8	**S4-7**	**S4-6**	**S4-5**	**S4-4**	**S4-3**	**S4-2**	**S4-1**
	Indirecto Monocr.	Indirecto Azul	Indirecto Verde	Indirecto Rojo	Directo Monocr.	Directo Azul	Directo Verde	Directo Rojo
PUSHDIM	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

Tabla 7: *Ajustes de interruptores dip S4 en modo PUSHDIM*

Los interruptores dip relacionados con **velocidad rotatoria** (S4-9 y S4-10) no se usan en este modo.

Configurar modo SWITCH-ON (véase también a continuación 10.3): ubicar el interruptor dip S5 y configurar según tabla 8.

Modo SWITCH-ON	**Interruptores DIP S5**	
	S5-1	**S5-2**
Seguridad: el sistema permanece apagado tras una pérdida y restablecimiento de la red eléctrica	OFF	OFF
Interruptor de pared: el sistema restaura el último escenario guardado tras pérdida y restablecimiento de la red eléctrica	ON	OFF

Tabla 8: *Ajustes de interruptores dip S5 en modo PUSHDIM para escoger modo SWITCH-ON tras una pérdida y restablecimiento de la red eléctrica.*

NB: por favor observe que el significado de estos modos es:
- **Seguridad: dejar el sistema apagado de forma segura tras pérdida y restablecimiento de la red eléctrica**
- **Interruptor de pared: para poder encender y apagar el sistema mediante el interruptor de pared o el interruptor temporizador. El último escenario guardado se restaurará cuando el interruptor de pared o temporizador sea reactivado.**

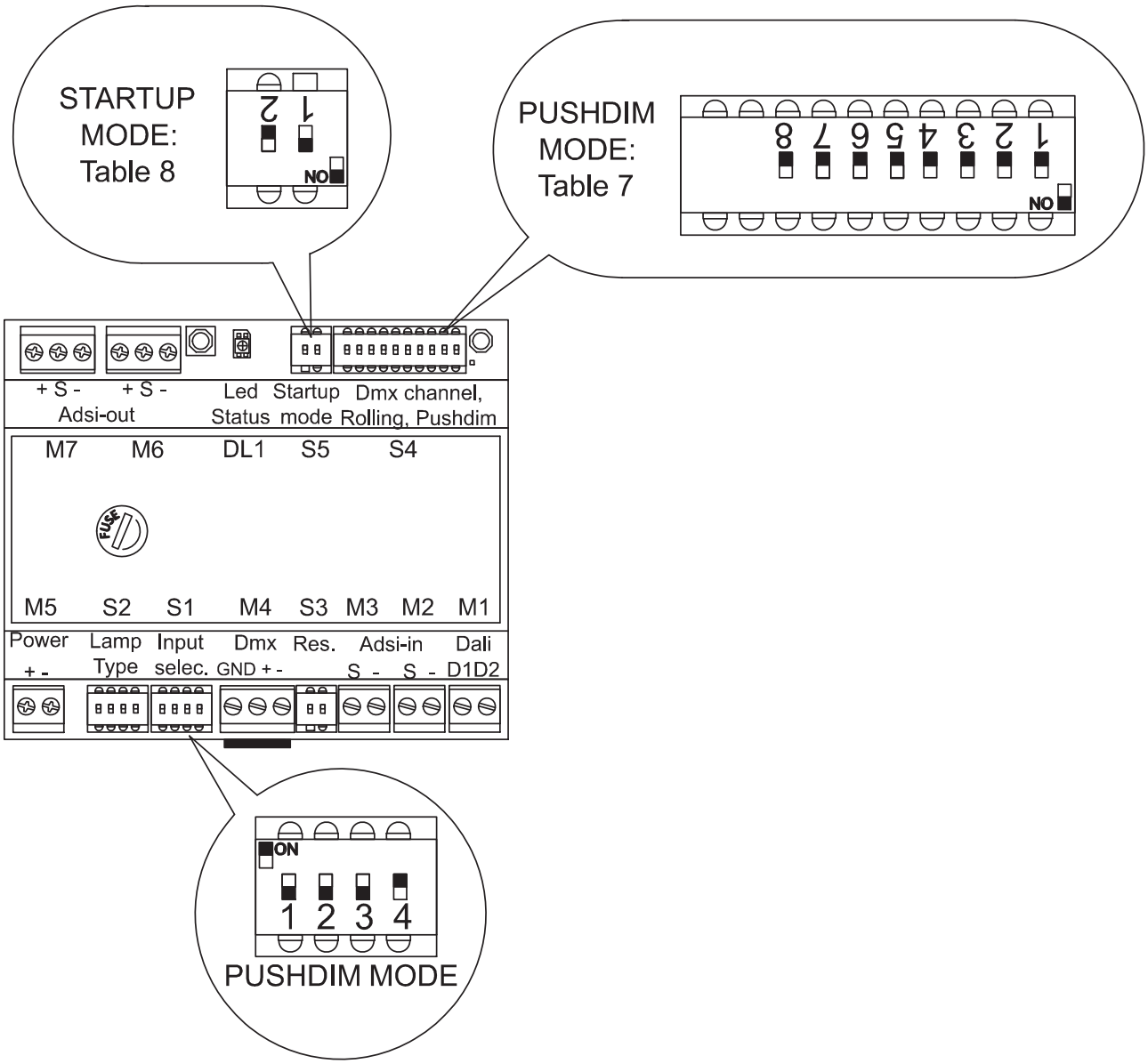


Fig. 10: *Ajustes de interruptores dip en modo «PUSHDIM»*

10.3 - FUNCIÓN DEL BOTÓN PULSADOR

El botón pulsador con el contacto abierto conectado de forma opcional a los bloques terminales M3-M5 puede usarse para:
- Encender y apagar el sistema mediante una pulsación «corta».
- Encender y apagar el sistema mediante una pulsación «corta». Mientras se pulse, el sistema se atenúa.
- Cuando el nivel máximo o mínimo se alcance, se para la regulación de iluminación; es necesario dejar de pulsar el botón pulsador y presionarlo de nuevo para invertir la regulación y comenzar a regular otra vez.
- Cada vez que se deja de pulsar el botón pulsador y se presiona de nuevo la regulación de iluminación se invierte (es decir, si la intensidad aumenta antes de dejar de pulsarlo, disminuirá en su siguiente pulsación).
- En el caso que sea necesario accionar distintos NODO-MASTER con un mismo pulsador, conectar los distintos NODO-MASTER en configuración MASTER-SLAVE, ver Fig.3b y el capítulo 8. Conectar el botón pulsador con el contacto abierto al NODO-MASTER «Maestro».

Ejemplos de uso:
- **Activar una misma intensidad fija al inicio:**
  - Configurar «interruptor de pared» en interruptor dip S5.
  - Escoger intensidad deseada mediante pulsación larga.
  - Desconectar de la corriente principal mediante el interruptor de pared o temporizador.
  - Cuando el interruptor de pared o temporizador se reactive, el escenario guardado se restaurará de nuevo.

11 – COMPROBACIÓN DEL SISTEMA, MENSAJES DE ERROR

Una vez que se enciende el suministro eléctrico, pueden suceder las siguientes situaciones:

a) Todas las secciones funcionan bien, respetando las sincronizaciones previstas por el diseño maestro-esclavo (si existe), mostrando los colores en el orden correcto.

b) Los aparatos RGB (o algunos de ellos) están encendidos de forma fija a una intensidad máxima (luz blanca), los aparatos MONO CROMÁTICOS (o algunos de ellos) realizan un ciclo de intensidad de mínima a máxima, luego permanecen fijos a intensidad máxima: esta situación significa que la conexión «S» entre NODO-MASTER y la sección no está bien realizada (interrupción, contactos falsos,...).

c) El «Led de Estado» en NODO-MASTER es VERDE permanente, pero la sección está apagada: esta situación significa que la conexión «+» y «-» entre NODO-MASTER y la sección no está bien hecha (interrupción, contacto falso, polaridad invertida, fusible quemado).

d) El «Led de Estado» en NODO-MASTER está apagado, y la sección está apagada: esta situación significa que la conexión «+» y «-» entre el suministro eléctrico y NODO-MASTER no está bien hecha (interrupción, contacto falso, polaridad invertida). Verificar si en M5 existe un 48 VDC con la polaridad correcta, si es así, NODO-MASTER tiene un error y el fusible también.

e) El «Led de Estado» en NODO-MASTER está encendido, pero no en VERDE permanente, comprobar las siguientes situaciones:
-El Led está permanentemente en ROJO: NODO-MASTER da error o cortocircuito en la salida M6 (o M7).
-El Led es 1 seg. ROJO, 1 seg. VERDE: sobrecarga en M6 (o M7) (baja tensión).
-El Led es 2 seg. ROJO, 2 seg. VERDE: sobretensión en M5.
-El Led es 5 seg. ROJO, 5 seg. VERDE: temperatura alta en NODO-MASTER.

NOTES