# REGOLED

## coemar



Quick instruction guide 1^ edizione, August 2004

### Index

1. Powering Up	Pag.	3
2. DMX 512 Addressing	Ш	4
3. Signal connection DMX 512	ш	4
<ul> <li>4. Dip-Switch Functions</li> <li>4.1 Auto Functions</li> <li>4.2 Test Functions</li> <li>4.3 Led Functions ON</li> <li>4.4 Strobe Functions</li> <li>4.5 Safe Mode Functions</li> <li>4.6 DR1 Functions</li> <li>4.7 Upload Functions</li> </ul>		44 556666
5. Led Signals	Ш	6
6. Frequently asked questions	11	7
7. DMX 512 Signal Functions	Ш	8
8. Spare parts	Ш	8
9. Problems and solutions	Ш	8

### Regoled +9-28V DC

#### **Quick instruction guide.**

#### Software version 1.01 or higher.

**IMPORTANT NOTE**: the notes below are valid for all functions.

- 1) Setting a dip-switch to ON activates the function.
- 2) The DMX address may be altered without the need to power down the **RegoLed**.

#### 1.Powering up

**RegoLed**'s input voltage must be kept to between **9** and **28** Volts DC, this varies according to the type of led being connected. For example, for a strip of **LineaLed 1ch** which operates at a voltage of around **12 V**, an input voltage of 12 V is necessary for the **Regoled**. A **LineaLed Multicolor which operates at a voltage of around 24 V** requires an input voltage of 24V to the **RegoLed**. This system allows the user to utilise a single DMX controller regardless of the type of Led strip being used. The **Coemar** sales network has available a range of power supplies which provide the constant current output necessary for maintaining a constant luminosity along each led in one or more strips of LineaLed

#### 1.1 Maximum current draw

**RegoLed** supports a maximum current draw of 7 Amps across at least two output circuits.



#### 2. DMX 512 addressing

Set the DMX 512 to which **Regoled will respond. Regoled** utilises 6 channels of DMX. example



#### 4.Dip-Switch functions 4.1 Auto function (dip-switch AUTO)

Setting the dip-switch to the **ON** position activates the **master/slave** function. this function inhibits DMX control.

-1

If dip-switches 1 to 9 are set to the **OFF position**, **Regoled** is set up to act as a **slave** example.



Regoled set as slave

out

to other RegoLed

non non non

Selecting any of the dip-switches **1-2-3-4-9** offers the opportunity of running a program: Dip switches **1-2-3-4** activated programs Prog. 1-prog.2-prog.3-prog.4 respectively. Dip-switch **9** will run all the programs sequentially.

It is possible to run a single program.

example.

	ON <b>1</b> 2 4 8 16	32 64 128 256 <sup>b</sup> 32 64 128 126 126 126 126 126 126 126 126 126 126	Regoled set as master running program 1							
Ī	Dip-switches 5 and 6 determine the program hold time.									
		time (wai	t time)							
	dip-switch 5	dip-switch 6								
	off	off	wait time 3 sec	onds						
	on	off	wait time 10 se	conds						
	off	on	wait time 30 se	conds						
	on	on	wait time 1 min	ute						

Dip-switches 7 and 8 determine the speed of the program.

	time (wai	t time)
dip-switch 5	dip-switch 6	
off	off	wait time 3 seconds
on	off	wait time 10 seconds
off	on	wait time 30 seconds
on	on	wait time 1 minute
u		

example.

_	1	2	4	8	16	32	64	128	256	auto	test	led on	strobe	safe	DR1	upload		
ON																	ON	

RegoLed set as master running program 3 with a wait time of 30 sec. and a fade time of 10 sec.

N.B. Dip-switch n.10 should be set to OFF if you want to use Regoled with other functions as it takes precedence over all the other dip-switches.

It is important to note that DMX signal must be disconnected when this function is activated in order to avoid conflicts.

#### 4.2 Test function (dip-switch TEST)

Allows the testing of every channel of the **Regoled** without the need for a controller. eg.

	1	2	4	8	16	32	64	128	256	auto	test	led on	strobe	safe	DR1	upload		
ON																	ON	

Setting the dip-switch to **ON** allows **regoled** to quickly **test** all channels sequentially.

#### 4.3. Led function ON (dip-switch LED ON)

It is possible to ensure that all leds connected to the **Regoled** stay on.and to alter their intensity. This function is activated by setting the **LED ON** dip-switch to the **ON** position and following the combinations outlined in the table below:

dip-switch 1	dip-switch 2	dip-switch 3	channel 1 (red)
on	off	off	channel 1 Iuminous intensit 20%
off	on	off	channel 1 Iuminous intensit 30%
on	on	off	channel 1 Iuminous intensit 40%
off	off	on	channel 1 luminous intensit 50%
on	off	on	channel 1 luminous intensit 60%
off	on	on	channel 1 Iuminous intensit 80%
on	on	on	channel 1 luminous intensit 100%
dip-switch 4	dip-switch 5	dip-switch 6	channel 2 (green)
on	off	off	channel 2 luminous intensity 20%
off	on	off	channel 2 Iuminous intensit 30%
on	on	off	channel 2 luminous intensity 40%
off	off	on	channel 2 luminous intensity 50%
on	off	on	channel 2 luminous intensity 60%
off	on	on	channel 2 luminous intensity 80%
on	on	on	channel 2 luminous intensit 100%
dip-switch 7	dip-switch 8	dip-switch 9	channel 3 (blue)
on	off	off	channel 3 luminous intensity 20%
off	on	off	channel 3 Iuminous intensity 30%
on	on	off	channel 3 Iuminous intensit 40%
off	off	on	channel 3 Iuminous intensit 50%
on	off	on	channel 3 luminous intensit 60%
off	on	on	channel 3 luminous intensit 80%
on	on	on	channel 3 luminous intensity 100%

N.B. The three channel dip-switches set to the OFF position represent to the leds being off.

example

ON	dip-switch <b>LED ON</b> set to <b>ON</b> chan- nel n. <b>1</b> at <b>20%</b> , channel n. <b>2</b> at <b>30%</b> and channel n. <b>3</b> at <b>60%</b>
ON 1 2 4 0 16 32 44 120 256 0 16 17 10 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	dip-switch LED ON set to on ON channel n.1 off, channel n.2 off and channel n.3 at 100%

N.B. If dip-switch Led ON is set to on DMX signal is inactive

#### 4.4. Strobe function (STROBO dip-switch )

Setting **STROBO** dip-switch to the **ON position** activates an accessory channel channel n.5 see DMX table) which activate the strobe effect. eg.

 Image: Non marked bit is the stroke offect is deactivated

 Image: Non marked bit is the stroke offect is deactivated

 Image: Non marked bit is the stroke offect is deactivated

#### 4.5. Safe mode effect (SAFE dip-switch)

Setting the **SAFE** dip-switch to the **ON position activates a** protection with NTC 15K, 10K variable resistance dimmer. With this function, it is possible to dim the output of the leds using a potentiometer.

#### 4.6. DR1 function (DR1 dip-switch)

Setting dip-switch **15** to the **ON position** bypasses hardware information and allows dialog with the **DR1** eg.

	1	2	4	8	16	32	64	128	256	auto	test	led on	strobe	safe	DR1	upload		
ON																	ON	
		2	3	4	5	6	7	8	1	2	3	4	5	6		8	J	

With this function, it is possible alter the dmx address and adjust **Regoled** settings without the need to adjust dip switches.

4.7 Upload function (UPLOAD dip-switch)

Allows uploading to occur, this dip-switch is activated only when needed.

#### 5. Led.signals

Three different leds indicate the operational state of your **Regoled**.

Led	Function	Led on	Led off	Led flashing
Green	circuit powered on	Present	absent	nil
Yellow	DMX state	DMX present bad connection	DMX absent	DMX OK
Red	Circuit error message	Circuit overloaded or high temperature	system OK	the type of flashing sug- gests one of four error types -1 flash -2 consecutive flashes -3 consecutive flashes -4 consecutive flashes

### 6. Frequently asked questions

Question	Answer
What is the maximum length strip which may be con- nected to the Regoled output?	The maximum length varies with the type of LineaLed being used and the powersupply being used. In LineaLED's technical information, nominal current draw for individual different coloured modules are stated. To calculate the number of LineaLed's which may be connected to a Regoled divide the maximum current draw for your particular powersupply by the nominal draw for each module. The maximum number of modules connected in series, "daisy-chained", is also limited by the powersupply and the voltage loss along each module, which reduces the luminosity of the LEDs furthest from the supply. Note, too, that the first module in the chain will need to sustain the total current draw of all the modules connected to it. This is an additional limiting factor to the number of modules which may be connected. The maximum current draw for the <b>RegoLed is 7A arranged over at least two outlets.</b> For LineaLed strips connected in parallel, the maximum draw over the four outlets is <b>7A</b> .
What is the maximum number of Regoled units which can be connected to a single powersupply unit.? Can LineaLed strips be connected in series separated by extension cables ?	This depends solely upon the powersupply. For example, if you had a 200VA powersupply, this would allow for up to three fully loaded Regoled units - around 6m of LineaLed Multicolor for each Regoled. The bigger the rating of the powersupply, the higher the number of Regoled units which may be connected. LineaLed can be connected in this manner, remembering the maximum length and the limits determined by the
	maximum output current of the RegoLed (7A) which must be distributed over more than one outlet.
What type of cable is needed to connect LineaLed and RegoLed?	This is noted in the LineaLed manual and is available on our web site.

#### **7.DMX signal functions**

channel	function	type of control	effect	deci	mal	perc	entage
1	master dimmer	proportional	adjust output intensity from 0 to 100%	0	- 255	0%	- 100%
2	red	proportional	proportional control of the percentage of red colour from 0 to	0	255	0%	100%
2	speed	proportional	fade speed between colours from fast to slow (from 1second to 1 minute)	0	- 255	0%	- 100%
note 1: o							
3	green	proportional	proportional control of the percentage of green colour from 0 to	0	255	0%	100%
3	pause	proportional	controls the pause time between colours (steps) selected via channel 6; the pause time is adjustable proportionally from 1second/3.30	0	- 255	0%	100%
note 2: o	channel 3 ha	as various functio	ns depending upon the selection made on channel 6				
4	blue	proportional	proportional control of the percentage of blue colour from 0 to 100%	0	- 255	0%	- 100%
		step	no effect	0	- 9	0%	- 4%
		proportional	variable speed strobing effect, from slow to fast	10	- 57	4%	- 22%
		step	stop strobe	58	- 59	23%	- 23%
		proportional	sequenced pulse effect, slow closing, fast opening (variable speed pulsing, from slow to fast)	60	- 108	24%	- 42%
		step	stop strobe	109	- 110	43%	- 43%
5	Strobe effect	proportional	sequenced pulse effect, slow closing, fast opening (variable speed pulsing, from slow to fast)	111	- 159	44%	- 62%
		step	stop strobe	160	- 161	63%	- 63%
		proportional	random strobe effect with variable speed from slow to fast and synchronised colours	162	- 207	64%	- 81%
		step	stop strobe	208	- 209	82%	- 82%
		proportional	random strobe effect with variable speed from slow to fast and non- synchronised colours	210	- 255	82%	100%
note 3: i	f dip switch	13 is set to on, t	he DMX table indicates the activation of an accessory channel	(5) for	strob	e effe	cts
			no effect	0	- 9	0%	- 4%
			automated program 1	10	- 50	4%	- 20%
	automoto d		automated program 2	51	- 91	20%	- 36%
6	functions	step	automated program 3	92	- 132	36%	- 52%
	Tunctions		automated program 4	133	- 173	52%	- 68%
			random program repeat	174	- 214	68%	- 84%
			repeat all programs in sequence	215	- 255	84%	100%
note 4:	oause and s	beed settings are	added				

8.Spare parts All the components of the **Regoled** are available as spare parts from your **Coemar** service centre. Specifying in detail the model number of the device and an accurate description of the specific parts required will assist us in mee-ting your request accurately and promptly.

#### 9. Problems and solutions

Problem	Possible solution
RegoLed won't turn on	No mains voltage supply to Regoled. Check that the green led is on and, if not, check <b>the input and output voltage at the transformer</b>
<b>RegoLed</b> will not respond to DMX signal.	-DMX signal is not being sent to <b>RegoLed</b> : <b>Check if the led indicating the presence of dmx if flashing. If not, check the out- put of your DMX controller and any cabling.</b>
	-Dip-switch number 10 may be set to ON. This may conflict with incoming <b>DMX signal</b> .
	-Dip-switch number 12 may be set to ON. This will stop any incoming DMX signal.
	-RegoLed may be incorrectly DMX addressed. Check the address setting.
<b>RegoLed</b> has been set to auto mode but will not run programs	-Dip-switch n.10 (auto) must be set to ON and a program selected (dip-switches 1-2-3-4-9 see section 4.1).
programs	-Multiple selections may have been made. Select only one <b>program at a time.</b>
The red led is on	-The output circuit has been overloaded or the ambient temperature is too high.
The red led is flashing	<ul> <li>-Error signal.</li> <li>Four different flashing modes: <ul> <li>-1 flashing</li> <li>-2 consecutive flashes</li> <li>-3 consecutive flashes</li> <li>-4 consecutive flashes</li> </ul> </li> <li>For further information, consult your Coemar service centre.</li> </ul>