

Product update

Sphere wireless lighting control system

> December 2010



With today's homeowners demanding more from their electrical installations, the need for greater control has never been more important. Sphere means more than just automation, offering total flexibility, convenience and energy efficiency, Sphere will show you the true meaning of control.



Applications:

- > Private residential
- > Offices
- > Hotel rooms

> Product features & benefits:

- > Fully wireless control offering either 5 or 8 channels
- > Suitable for use with different lighting loads (incandescent lamp, LV halogen lamp, fluorescent and LED lamp)
- > Combines control for both fixed and portable lighting e.g table lamps, floor uplighters etc
- > Ability to control non light sources such as extractor fans and pumps
- > Soft start operation not only prolongs lamp life but creates a gentle light adjustment between scenes
- > Battery operated controllers makes them suitable for use in any room, even in the bathroom or outdoors (limited IP rating)
- > Receivers are easily wired into existing installation (may require some modifications to circuitry). Suitable for both new build and retrofitting
- > Programming is simple using the controller, avoiding complex software and programming steps
- > Mastering option enables one controller to control Scene 1 in each of the rooms Sphere is operating in
- > Complements the Ultimate screwless flat plate range

Technical Overview:

General information

Voltage	220 – 240V 50Hz
Operating frequency	433MHz
Number of channels	5 or 8
Number of unique house codes	256
Operating distance	30 meters
Operating temperature	0°C to + 40°C
Operating humidity	0% to 95%

Receiver termination

Product	Code	Termination
Ceiling dimmable receiver	GSWCDR35	L & N*
Ceiling relay receiver	GSWCRR5A	L & N*
Floor dimmable receiver	GSWFDR35	L, N, & E
Fluorescent dimmable receiver	GSW10VFLDR	L, N, & E

* For earth continuity the supply & load earth conductors must be terminated externally from the receiver.

Technical:

Lamp / Load type		Sphere component			
		Dimming			Switching
		Ceiling/Floor dimmable receiver GSWCDR35 GSWFDR35	Wall dimmable receiver GSWWDR30	Fluorescent dimmable receiver GSW10VFLDR	Ceiling relay receiver GSWCRR5A
Min/Max loads		Min 20W/VA Max 350W/VA	Min 50VA/60W Max 300W/VA	Max 800W / 4 ballasts	Max 5A (2A motor load) (1)
Low Voltage (12V) halogen lamps	Dimming electronic or magnetic transformer (4)	Y	Y – (trailing edge electronic transformers only)	N	Y – on/off only
Mains GLS / reflector etc, mains (230/240V) halogen lamps (3)		Y	Y	N	Y – on/off only
Linear fluorescent lamps	T8 and high output T5 lamps	N	N	Y (only with 1-10V control electronic ballast)	Y – on/off only
Linear fluorescent lamps	T4 lamps and T5 4-13W lamps	N	N	N	Y – on/off only
Compact fluorescent lamps with separate ballast	4 pin lamps	N	N	Y (only with 1-10V control electronic ballast)	Y – on/off only
CFLi lamps (including those marked 'dimmable')	'Plug-in' Compact fluorescent lamps	N	N	N	Y – on/off only
Light-emitting diode (LED) (Solid state lighting)	Mains voltage lamps	N (2)	N (2)	N	Y – on/off only
Light-emitting diode (LED) (Solid state lighting)	When used with separate driver	N	N	Y (with 1-10V control driver)	Y – on/off only
High intensity discharge lamps		N	N	N	Y – on/off only Max 400W (1)
Other loads: relay, contactor, ceiling fan, wall fan, extractor fan etc.	Motor load	N	N	N	Y – on/off only
Luminaires that already incorporate a dimmer	Father / child up lighter etc	N	N	N	Y – on/off only



Notes:

1. For higher loads use a suitable contactor.
2. Dimmable LED lamps may be suitable for use with Ceiling / Floor dimmable receivers, if designed for use with triac (leading edge) type dimmer. Dimmable LED lamps may be compatible with the Wall dimmable receiver if designed for use with trailing edge type dimmer.
3. Avoid using inferior economy or unbranded mains voltage incandescent or halogen lamps.
4. Using dimming electronic transformers and low voltage halogen lamps eliminates potential end of life issues with mains halogen and incandescent lamps. When dimming with electronic transformers check minimum loading with manufacturer. Do not use torodial (round shape) magnetic transformers unless specifically stated by the manufacturer to be dimmable. Do not mix electronic and magnetic transformers on the same receiver.

For more information visit www.schneider-electric.co.uk or call 0870 608 8 608