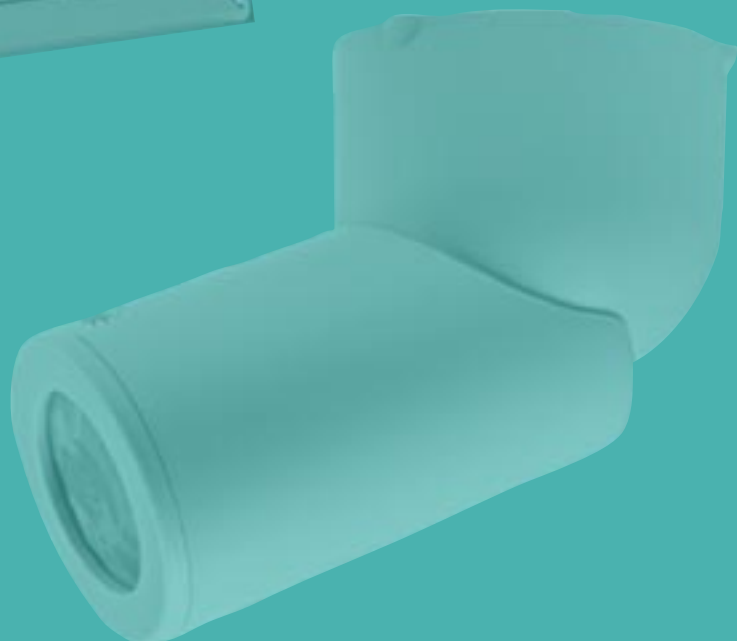
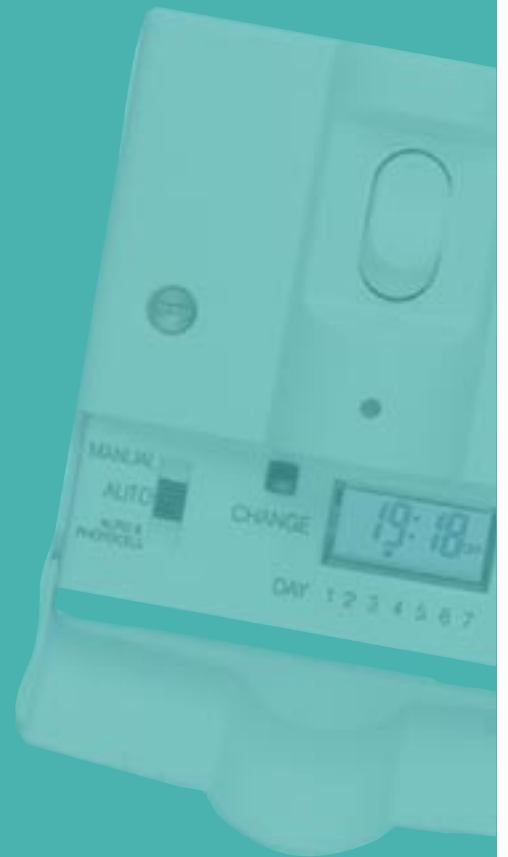
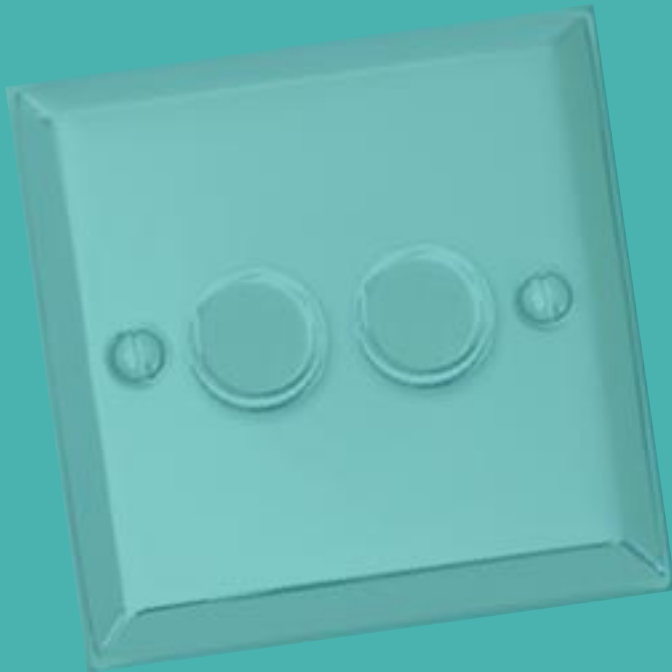


Presence Detection	132
Lighting Control Wiring	133
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Scene Setting & Lighting Control	138
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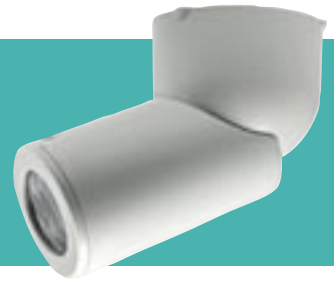


PRESENCE DETECTION & PIR SENSORS

Ideal for reducing energy costs, where internal foot traffic is usually light. Save power and save energy. Reduce your carbon footprint and save money.



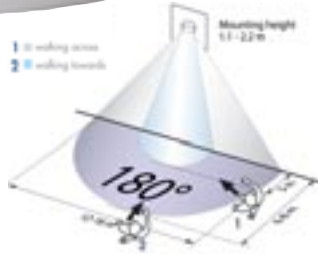
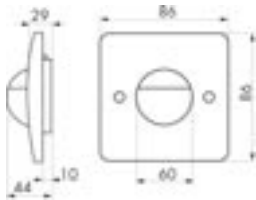
IP21/44



SECTOR

STAND ALONE (WALL MOUNT SWITCH REPLACEMENT)

Part No.	Description	Code
2 Wire		
SSPIROS2W	PIR Operated Wall Switch (No Neutral Required)	4484
3 Wire		
SSPIROS3W	PIR Operated Wall Switch (Neutral Required)	4484



SPECIFICATION

2 Wire & 3 Wire

- 180° coverage at 8m
- Built in microphone, detector re-triggers on sound as well as motion
- Time delay range: 15 secs - 16 mins
- Fits a standard 16mm back box
- Photocell range: 5 - 2000 lux

3 Wire

- Switches 2300W incandescent and 1150W fluorescent loads

2 Wire

- Switches 3000W incandescent and 1500W fluorescent loads
- Built in re-chargeable nickel metal halide (NiMH)
- Minimum load 40W

SECTOR

STAND ALONE (DIRECTIONAL CEILING MOUNT)

Part No.	Description	Code
PIR Detectors		
SSPIROS DIR	Direction PIR (Standard)	4483
SSPIROS DIR LR	Direction PIR (Long Range)	4483
Mounting Base (Socket) For Directional PIR Detector		
SSPIROS DIR SK	Mounting Base/Socket	4483



SPECIFICATION

- Vandal resistant polycarbonate construction
- Time lag range: 10 secs - 40 mins in 9 steps
- Photocell range: 100 - 1000 lux, and inactive
- Loading: Up to 6 amps (1500W) of any type of load (including fluorescent lights and fans)

Standard Version

- Detection zone: 120°, range 5m walking towards, 10m walking across

Long Range Version

- Ideal for corridors and storage aisles
- Detection zone: 6°, range up to 25m

SECTOR

STAND ALONE (RECESSED)

Part No.	Description	Code
Recessed		
SSPIROS R	Ceiling Mount PIR	4486



SPECIFICATION

- Time lag range: 15 seconds to 30 minutes
- Photocell range: 40 - 2000 Lux
- Loading: 2000W (Resitive), 1000W (Fluor)

SECTOR

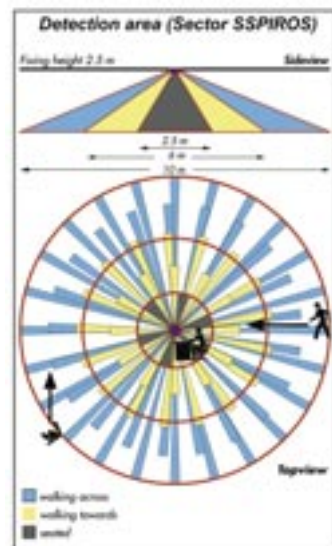
STAND ALONE (SURFACE)

Part No.	Description	Code
Surface Mount (IP44)		
SSPIROS S	Ceiling Mount PIR (IP44)	4487

IP44



Plug-in detector/base to simplify and speed up installation (surface mount)



KLICK LIGHTING CONTROL SYSTEM

The comprehensive Klik range offers a quick and easy way to control lighting in ceiling voids

SPECIFICATION

- Compact - allows installation in confined spaces
- Mains terminal capacity 5 x 4mm²
- Mains terminal rated at 16 Amps
- Sockets rated at 6 Amps
- Complies with BS 5733



CEILING DISTRIBUTION BOXES

Part No.	Description	Code
KLDS4	4 Ways	4011
KLDS6	6 Ways	4012
KLDS8	8 Ways	4013
KLDS10	10 Ways	4015
KLDS12	12 Ways	4016

SPECIFICATION

- 3 pin plugs have terminations for live, neutral and earth and are suitable for use with any Klik lighting or Klik AX sockets and Klik KLDS
- 4 pin plugs have terminations for live, neutral, earth and auxiliary and are suitable only for use with Klik AX sockets and Klik KLDS



6A PLUGS

Part No.	Description	Code
White		
P22	3 Pins	4019
P64AX	4 Pins	4020
Red		
P64AXR RED	4 Pins	4020

SPECIFICATION

- Ceiling roses pre-wired with heat resisting PVC flexible cord, complying with BS 6500



6A PRE-WIRED CEILING ROSES

Part No.	Description	Code
PCR2000/2.0	2m Cord, 3 Pin	4041
PCR2000/3.0	3m Cord, 3 Pin	4056
CR64AX/2.0	2m Cord, 4 Pin	4076
CR64AX/3.0	3m Cord, 4 Pin	4077
CR64AX/4.0	4m Cord, 4 Pin	4077

SPECIFICATION

- PCR2000: Plug has 3 terminations live, neutral and earth. Socket has 4 terminations live, neutral, earth and loop in
- CR64AX: Plug has 4 terminations live, neutral, earth and auxiliary. Socket has 5 terminations live, neutral, earth, auxiliary and loop in



6A PLUG-IN CEILING ROSES

Part No.	Description	Code
PCR2000	3 Pin	2760
CR64AX	4 Pin	2761

SPECIFICATION

- Size: 85mm dia. x 31mm deep
- Fixings: 50.8mm standard diagonal (BESA)
- Complies with BS 5733



MOUNTING BOXES

Part No.	Description	Code
MB2	Mounting Boxes	4017

SPECIFICATION

- Plugs pre-wired with heat resisting PVC flexible cord, complying with BS 6500



6A PRE-WIRED PLUGS

Part No.	Description	Code
White Plug with 0.75mm² Flex		
P22/2.0	2m Cord, 3 Pins	4033
P22/3.0	3m Cord, 3 Pins	4033
P22/4.0	4m Cord, 3 Pins	4033
White Plug with 1mm² Flex		
P22/1.0PVC/3	3m Cord, 3 Pins	4033
P22/1.0PVC/5	5m Cord, 3 Pins	4033
P64AX/1.0PVC/5	5m Cord, 4 Pins	4035
Red Plug with 0.75mm² Flex		
P64AXR/3.0	3m Cord, 4 Pins	4035
P64AXR/4.0	4m Cord, 4 Pins	4035
Red Plug with 1mm² Flex		
P64AXR1.0PVC/5	5m Cord, 4 Pins	4035

IDEAL FOR

- Shops
- Warehouses
- Malls
- Offices
- Recessed Ceilings



TIME CONTROLLERS & SECURITY SWITCHES

A selection of controls to cover many applications.



COMPACT 24 HOUR CONTROLLERS

Part No.	Description	Code
SCTS960	24hr 1 Gang Segment Contoller	3015
SCTU9000	24hr + 7 Day 1 Gang Digital Contoller	3015



SPECIFICATION

- SCTS960: 30 minute minimum switching and permanent On/Off
- SCTU9000: 6 programmes available to operate over 7 days and 42 On and Off switches per week
- To control up to 400W tungsten lighting only
- Fits traditional 1 gang mounting box

ROUND PATTERN TIME SWITCHES

Part No.	Description	Code
SRTS113	3 Pin 20A 24 On/Off + Day Omit	3013



SPECIFICATION

- Industry standard round pattern time switch. Can be used as a direct replacement for single channel On/Off switching 24 On/Off programmes in 24 hours
- Half day(s) and day(s) omit unlimited over 7 day period
- Permanent On facility
- Manual override

PROGRAMMABLE SECURITY LIGHT SWITCHES

Part No.	Description	Code
S210SS	1 Gang	2895



SPECIFICATION

- Can be used as a normal or 2 way light switch
- Light activated to switch on / time activated to switch off
- Light level control
- Min lamp size 40W, max lamp size 300W

7 DAY DIGITAL SECURITY LIGHT SWITCHES

Part No.	Description	Code
SZ700	1 Gang	2895



SPECIFICATION

- 24hr 7 day light switch to automatically switch filament, fluorescent, low energy and LV lamps On and Off
- 300W incandescent, 76W fluorescent
- CFL up to 25W and 200W low voltage

ELECTRONIC TIME DELAY SWITCHES

Part No.	Description	Code
SDS1MAST	1 Gang Master	2885
SDS1SLAV	1 Gang Slave	2885



SPECIFICATION

- 2 wire connection - Neutral not required
- Neon button highlights switch in dark areas
- Adjustable light On time from 10 secs to 10 mins. Via a tamperproof potentiometer
- For use with incandescent lighting up to 1.5kW and 20-200W of low voltage lighting (not suitable for fluorescent and CFL)



IDEAL FOR

- Houses
- Flats
- Offices
- Stairwells
- Warehouses



IP65/55

PHOTO ELECTRIC CELLS

A complete range of controls to provide optimum control over a wide range of luminaires and applications.

SPECIFICATION

- Switch 1000W resistive 600W inductive loads
- Intelligent part night version switches off during very early hours of the morning than on again just before dawn
- Surge protection included
- Operates -20° to +80°
- 0.5W energy consumption



PHOTO ELECTRIC CELLS (NEMA HEAD)

Part No.	Description	Code
SPEC4E (A/SRG)	Photo Electric Cell (Head)	4370
SPEC4EKIT	Photo Electric Cell Kit	4371
SPEC9PN	Part Night Cell Kit	4371

- IP65

SPECIFICATION

- Mounts in 20mm dia. aperture
- Switch 600W resistive 300W inductive
- 0.25W energy consumption
- Remote version enables mounting in the smallest of luminaires
- Switches on at 70 Lux



MINIATURE PHOTO ELECTRIC CELLS

Part No.	Description	Code
SPEC20	20mm Photo Electric Cell	4372
SPEC20/R	20mm Photo Electric Cell Remote Head	4373

Control Unit Dims: 45 x 45 x 30mm

- IP65

SPECIFICATION

- Energy efficient, integral timeswitch
- Allows on at dusk with fixed time off of 2, 4, 6 and 8 hours
- Switch 1000W resistive 600W inductive loads
- Easy entry and termination
- Twilight settings 3-1000 Lux



WALL MOUNT PHOTO ELECTRIC CELL

Part No.	Description	Code
SVAR04	Varocell Time & Lux Adjustable	4374

Dims: 105 x 79 x 36mm

- IP55

IDEAL FOR

- Perimeters
- Car Parks
- Patios
- Gardens
- Signage
- Facades

■ IP ratings explained see page 141



DIMMERS

DIMMING FACE PLATES & RETROFIT MODULES

A complete range of dimming controls to cover most small and domestic applications. With the introduction of new Sector retrofit modules providing higher ratings, soft start and even HFR control then lighting control and energy management from existing and coordinating faceplates has never been easier.



WHITE PLASTIC DIMMERS

Part No.	Description	Code
Sequel Slim Curved Profile		
S881P	1 Gang 60-400w	5001
S882P	2 Gang 60-400w	5002
S883P	3 Gang 60-400w	5003
S884P	4 Gang 60-400w	5004
Square Corner Range		
SSPD1	1 Gang 60-400w	5001
SSPD2	2 Gang 60-400w	5002
SSPD3	3 Gang 60-400w	5003
SSPD4	4 Gang 60-400w	5004

Recommended to fit standard 25mm deep back boxes



SPECIFICATION

- Push on/off with rotary control
- Only suitable for Mains voltage Filament lamps
- De-rate load by 25% for High inrush Halogen lamps
- Standard 6mm dia module thread and spindle

METAL FACEPLATE DIMMERS

Part No.	Description	Code
Sequel Screwless Flatplate Brushed Stainless		
SFBS81P	1 Gang 60-400w	5011
SFBS82P	2 Gang 60-400w	5012
SFBS83P	3 Gang 60-400w	5013
SFBS84P	4 Gang 60-400w	5014
Sequel Screw fix Flatplate Polished Chrome		
SSPC81P	1 Gang 60-400w	5011
SSPC82P	2 Gang 60-400w	5012
SSPC83P	3 Gang 60-400w	5013
SSPC84P	4 Gang 60-400w	5014
Debonair Bevel Edge Polished Chrome		
SSC681	1 Gang 60-400w	5011
SSC682	2 Gang 60-400w	5012
SSC683	3 Gang 60-400w	5013
SSC684	4 Gang 60-400w	5014
Warwick/York Polished Brass		
SRV181B	1 Gang 60-400w	5011
SRV182B	2 Gang 60-400w	5012
SRV183B	3 Gang 60-400w	5013
SRV184B	4 Gang 60-400w	5014

Other Combinations available including rope edge and Brushed Nickel

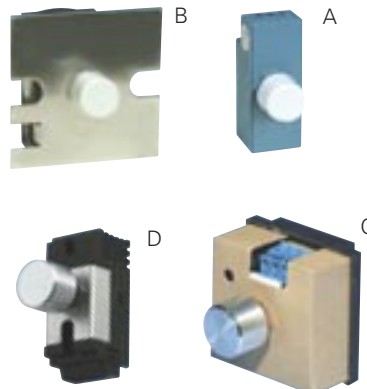


SPECIFICATION

- Push on/off with rotary control
- Only suitable for Mains voltage Filament lamps
- De-rate load by 25% for High inrush Halogen lamps
- Standard 6mm dia module thread and spindle

RETROFIT DIMMER MODULES

Part No.	Description	Fig Code
Halogen / LV		
SSPD1MOD400	60-400VA Single Module	A 5021
SSPD1MOD700	150-600VA Double Module + Plate	B 5021
SSPD1MOD4ASW	4 Amp Push switch Single Module	A 5021
SSPD1MOD3AINT	3 Amp Intermediate Push Single Module	A 5021
LV Trailing Edge		
SSPD1MOD600TE	10-600W LV Double Module	C 5021
HFR 1-10V Fluorescent and LED		
SSPD1MODHFR	1-7 Ballast/Driver Single Module	D 5023



SPECIFICATION

- Push on/off with rotary control
- Standard 6mm dia module thread and spindle
- Soft start for prolonged lamp life and no need to de-rate for halogen lamps
- Compatible with all Sector and Stratus LV Transformers
- Unique trailing edge LV version for specialist transformer compatibility
- HFR module can switch upto 60 ballasts/drivers with the use of a separate switch wired to the on/off contacts
- Module faceplate loading is subject to limits due to heat see configuration chart on page 137



GRID SYSTEMS



The Grid range offers a modular switching and monitoring system which includes switches, indicators, secret key switches, printed switches - making it the ideal system for commercial and public building applications. Grid dimmers can provide energy saving with up to 20 times longer lamp life

SPECIFICATION

- Attractive slim curved frontplates to match the extensive sequel range of wiring accessories



SPECIFICATION

- No plastic surround on switches
- Clearly printed terminal marking with captive terminal screws
- Interchangeable rockers with and without application printing
- Manufactured to BS EN 60669-1



SPECIFICATION

- Push On/Off with rotary dim operation
- Soft start with no need to derate when used with mains halogen lamps
- To allow heat dissipation distribute dimmers evenly across grid
- Fits 35mm deep box 41mm recommended
- Complete with 5 multi brand grid mounts
- Max Load 1g=500W / 400VA, 2g=700W / 600VA
- HFR module can control upto 7 fluorescent ballasts or 10 dimmable led drivers. Maximum is 60 if used with a separate on/off switch
- Remote dimmer pack prewired with 1m flex and grid controller with many of the features of the universal grid dimmers
- The ideal solution to remove heat and any noise from control plates where it may become an issue as listed in the selection chart
- Remote 1000W or 700VA



SECTOR

SEQUEL GRID WHITE FRONT PLATES

Part No.	Description	Code
SG81	1 Gang	9221
SG82	2 Gang	9221
SG83	3 Gang	9223
SG84	4 Gang	9223
SG86	6 Gang	9226
SG88	8 Gang	9226

SEQUEL GRID FIXING GRIDS

Part No.	Description	Code
SGFR12	1-2 Gang	9222
SGFR34	3-4 Gang	9224

SEQUEL GRID 20A - 20AX WHITE MODULES

Part No.	Description	Code
SG12	SP 2 Way	9231
SG30	DP 1 Way	9232
SG13	Intermediate	9233
SG30	Retractive - Marked 'PRESS' SP 2 Way	9234
SG12KY	SP 2 Way Key	9235
SG12EL	SP 2 Way Emergency Key	9235

UNIVERSAL GRID DIMMERS

Part No.	Description	Code
LV/Halogen		
SSPD1GRID400	400VA 1 Gang Required	5021
SSPD1GRID600	600VA 2 Gangs Required	5022
SSPD1GRID3AINT	3A Push & Intermediate 1 Gang Required	5022
Dimmable Integrated Compact Fluorescent		
SSPD1GRIDCFL	12-66W 1 Gang Required	5025
1-10V HFR Fluorescent/LED		
SSPD1GRIDHFRD	1 Gang Required + Switch	5023
Remote		
SSPD1GRID7REM	700VA 1 Gang Required	5024

Suffix:
White as Standard
/B = Black

IDEAL FOR

- Houses
- Flats
- Offices
- Reception Areas
- Hair Salons
- Pubs
- Cafes
- Restaurants

CONFIGURATION SELECTION CHART

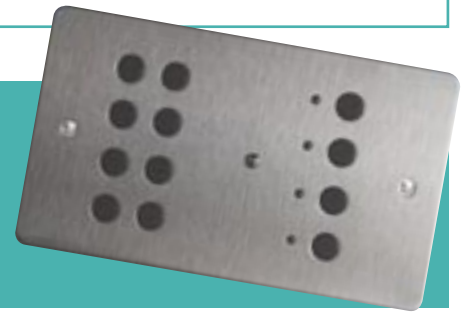
The following total plate loads must not be exceeded. For higher loads use remote dimmer

GRIDPLATE TYPE	WATTS	VA
1 and 2 Modules	500	400
3 and 4 Modules	1000	700
6 and 8 Modules	1500	1000
9 and 12 Modules	2000	1350
18 Modules	2500	1800
24 Modules	3000	2000

DIMMING SYSTEMS

MULTIDIM SCENE SETTING AND LIGHTING CONTROL

Controlling an areas lighting with a scene setting dimming system provides not only lighting to suit the mood but increased lamp life and above all a cost effective energy saving solution to lighting control.



MULTIDIM STARTER PACKS

Part No.	Description	Code
Halogen/LV Control		
MDK1VA1200 SS	1x1200W single channel kit	5026
MDK2VA1200 SS	2x1200W 2 channel kit	5026
MDK4VA600 SS	4X600W 4 channel kit	5026
LED/Fluorescent Control		
MDK1HFR7 SS	1 Channel 1-10V HFR kit	5027
MDK2HFR7 SS	2 Channel 1-10V HFR kit	5027
MDK4HFR7 SS	4 Channel 1-10V HFR kit	5027

Remote Pack dimensions 260x170x65 weight 2 kg
Wall controls fit standard 35mm deep back boxes



SPECIFICATION

- 1, 2 or 4 channel remote kits with frontplate and handheld remote
- Flat Stainless steel frontplate (white available)
- Intuitive programming via frontplate or remote
- Halogen and LV soft start with no need to De-rate load
- HFR Units can control upto 7 fluorescent ballasts or 10 led drivers per channel (expandable up to 100 with contactor)

MULTIDIM MODULAR DEVICES

Part No.	Description	Code
Dimmer Packs		
MD1X1200	1X1200W VA pack	5026
MD2X1200	2X1200W VA pack	5026
MD4X600	4X600W VA pack	5026
MD1X5000	1X5000W VA pack	5026
MD2XSW	2X16A Relay pack	5026
MD1X10V	1X 1-10V HFR pack	5027
MD2X10V	2X 1-10V HFR pack	5027

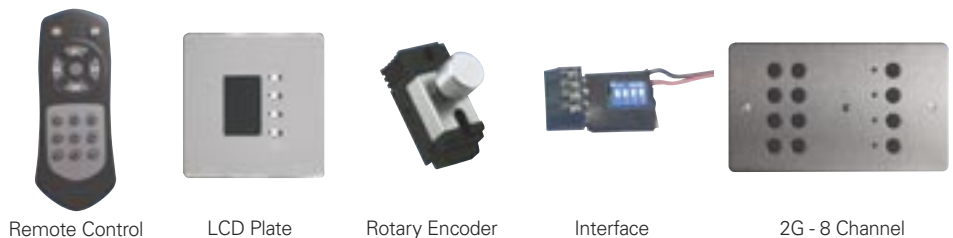
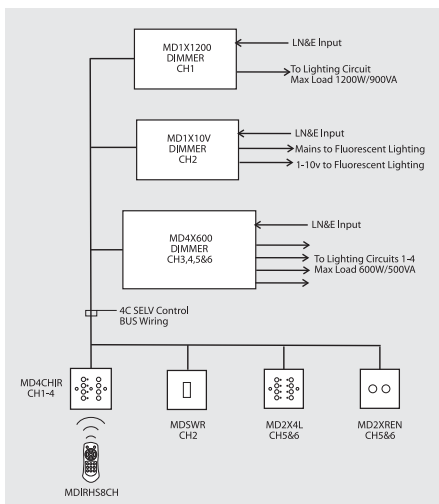
Stainless Steel Flat Wallplates		
MDCK1XRENSS	1G Steel Rotary Control	5029
MDCK4CHSS	1G 4 Channel 4 Scene push button	5029
MDCK8CHMOMSS	1G 8 Channel Raise/Lower push button	5029
MDCK8CHSS	2G 8 Channel 4 Scene push button	5029
MDCK1MAST	1G Last setting all off/recall	5029
MD41GLCD	1G LCD 4 Scene Recall	5029

Control Devices		
MDIRHS8CH	16 Chan 8 Scene I/R Handheld	5028
MDGRID1XREN	Multigrid Rotary Encoder	5028
MDSWR	Interface for retractive switch	5028

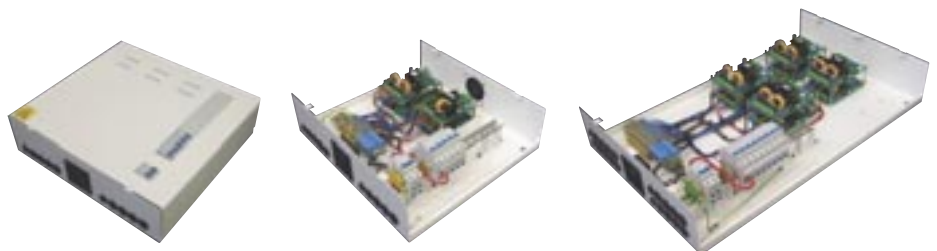


SPECIFICATION

- Full Range of expansion devices that can also be customised into individual scene setting control solutions
- 2 Channel unit features auxiliary contacts for additional switching (eg Fans)
- 16 Zones per systems standard (more can be added)
- Unlimited addressable channels with optional PC connection
- Simple multiway scene setting by linking frontplate and control devices
- Many frontplate options as standard with customised plate matching service available
- Bespoke Rack systems and prewired cabinets can be designed upto 750KW and 150 Channel Systems



Remote Control LCD Plate Rotary Encoder Interface 2G - 8 Channel



Special Dimmable Rack Panels can be Designed and Built to order

STANDARD RESISTIVE DIMMING

Standard Dimming includes Incandescent, Halogen Low Voltage and more recently Integrated ballast Compact Fluorescent lamps. Although common this can still be fraught with problems. Many basic Dimmers require de-rating for high inrush current Halogen lamps. Many modern quality electronic transformers can be dimmed using a common dimmer but care should be taken to ensure dimmer and transformer are compatible. Common problems include flickering of lamps and failure to reach maximum or minimum light levels. When dimming CFLs reference should be made to the lamp manufacturers latest information. Sector soft start dimmer Grid and Retrofit modules are soft start, do not have to be de-rated and have been tested with all Sector and Stratus Transformers.

Example:

Sector SF50GF WHI - Fire rated downlight (Page 27)
Sector SSPD1MOD400 - Module requires front plate (Page 136)

ENERGY SAVING

Using a dimmer will save energy usage.

A conventional dimmer works by switching the power to the lamp off for a small period of time, 100 times a second.

Dimming will also increase the life of Tungsten and GLS lamps.

Approximate details are given in the following table.

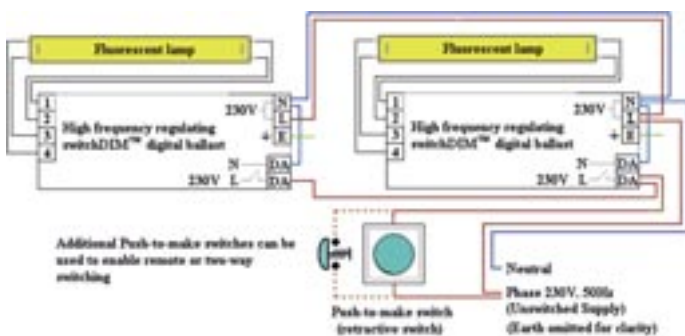
Light output dimmed by:	Energy Saving	Lamp Life
10%	10%	2 x Longer
25%	20%	4 x Longer
50%	40%	10 x Longer
75%	60%	20 x Longer

FLUORESCENT SWITCH DIMMING

Simple Dimming with a press switch can be easily achieved using a Switch Dim Digital ballast incorporated into the luminaire. A retractive switch alternates the light on/off and a hold of the switch cycles the light through a dimming cycle. No more than 12 ballasts are recommended on each circuit. Luminaires can be synchronised to each other with a ten second hold of the retractive switch. Push switches can be wired in parallel enabling two way switching and energy saving lighting control.

Example :

Stratus HPLM142-T/SD (Page 34)
Sector SG30 Retractive Grid Switch (Page 137)

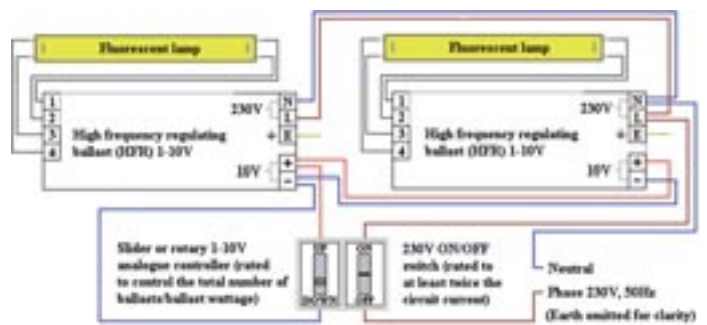


HFR 1-10V ANALOGUE LED AND FLUORESCENT DIMMING

High Frequency Regulated (1-10V) Dimming is one way of controlling a fluorescent or LED Luminaire using a simple potentiometer wired into the ballast or driver, this can then have the user interface of simple control knob, LCD panel, handheld remote or intelligent system. The HFR ballast/driver provides the 10V output and the potentiometer returns to the ballast/driver a regulated value, say 5V for a 50% dimmed light. The two wires controlling the dimming will need to be wired to each ballast/driver powering the luminaire and fed back to the controller. HFR dimming allows interaction with proximity sensors and PIRs to enable automatic lighting control and Energy saving schemes.

Example :

Stratus FMPR664HFR2 - Recessed Cat 2 600x600 (Page 74)
Sector SSPD1GRIDHFRD - Grid Dimmer requires accessories (Page 137)



DSI / DALI LIGHTING CONTROL

Digital Addressable Lighting Interface (DALI) provides an interchangeable control system across many manufacturers and enables addressable control of luminaires as well as Daylight, absence and presence detection. Digitally controlled lighting systems requires a minimum of 3 components: ballast, bus power supply and controller. This digital control enables simplified wiring, and power circuits can be planned without regard to the control circuits and can be wired in the same conduit. Two way communication with DALI devices enables reporting of device errors and current lighting levels. Link DSI energy efficient luminaires to Sensors and intelligent daylight linking and proximity control, to achieve fantastic energy efficiency PAYBACKS.

Example :

Stratus TTNT5380DSI(E) (Page 100)
Stratus TTNR5 DSI (Page 100)

