

Product Description

The iSmooth is a device that converts a standard biased switch (often called retractive or momentary push button switch) into a high quality 0-10V dimmer switch. It can be easily mounted behind the switch plate and is connected with a flat data cable to the nearest point on the iCon bus using a multi-port connector.

All SELV, no mains power anywhere. iSmooth gives you complete freedom of choice of switch plates from all brands.

These products are also available with a last dimmed memory function. See the Part Numbers table for more information.



How it Works

Single throw switch plates.

- Hold push switch down to fade from max to min and min to max cyclically, until the switch is released. 0.5 sec dwell at each extreme.
 - Press longer than 10ms but shorter than 0.5 second and the connected LED fixtures are switched On, either to Max, or to memorised last level, depending on i-smooth type.
 - If pressed for longer than 0.5 second the LED fixtures start to fade up until released, holding at max (also switches on if the fixtures were off).
 - If pressed for longer than 10ms but shorter than 0.5 second, the connected LED fixtures switch OFF.
 - If pressed for longer than 0.5 second, a fade down is initiated until released, holding at min (if the fixtures were initially on).
 - Dimming from maximum to minimum brightness is approximately 4 seconds with 0.5 second dwell at each extreme.

Double Throw Switch plates (See Part Numbers).

Master & Slave Versions with Wiring Details.

iSmooth comes in various options, which option to use depends on your control configuration, see table below.

A complete list of the options is described in the Part Numbers section of this data sheet.

- Blue iSmooth (acting as Master)
- Red iSmooth (acting as Slave)
- White iSmooth for group ON/OFF control from Power Hub.

The Red iSmooth devices can also be used in combination with iSense multi-sensors.

All iSotera devices communicate via the iCon bus which comprises a simple inter-wiring system based on four core flat telephone cables and RJ11 type connectors.

All devices are effectively connected in parallel on to the bus wiring by the use of iSotera Multi-Port connectors which 'T' into it at any point. For more information refer to the document iSotera Controls, Principles of Operation, which can be found on our web site.

To switch and dim groups of up to 40 LED fixtures, one Blue and multiple Red devices can be connected in any sequence on the iCon bus using iCon cables and multi-port connectors.

The Red iSmooth devices can also be used in combination with iSense multi-sensors by connection to BLUE coded plugs which will give light level and on/off control. There can only ever be ONE BLUE device in a control group as the Blue is the Master.

There can only be one master. For further advice please contact Isotera.

4 Way Multi Port Connector



Wiring Examples



Blue Master Single Pole



Blue Master Double Pole



Red Slave Double Pole

Control Configuration	iSmooth Selection
One Way Switching	Blue
Multi Way Switching	1 Master. All others must be Red (Slaves).
Switches with Multi-Sensor	All Red iSmooth's, use Blue connection from Multi-Sense.

Compliance

Title	Description	Edition/Date
EN 55015	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment	2006 + A2:2009
EN61547	Specification for equipment for general lighting purposes. EMC immunity requirements	2009
EN61000	Harmonic Current Emissions	EN61000-3-2:2006 EN61000-3-3:2008 EN61000-6-1:2007 EN61000-6-3:2007 & A1:2011
EN61347	Safety requirements for electronic control gear for use on DC supplies up to 250 V and AC supplies up to 1 000 V at 50 Hz or 60 Hz and at an output frequency which can deviate from the supply frequency, associated with LED modules.	EN61347-2-13:2006 used in conjunction with EN61347-1:2008.
EN62493	Human Exposure To electromagnetic fields	EN62493:2010

Part Numbers

Isotera iSmooth Part Number	Product Description	Sleeving Colour
IS-H-SIM-White	Switch	White
IS-H-SIM-Red	Slave Switch	Red
IS-H-SIM-Blue	Master Switch 1 Pole No Dimming Memory	Blue
IS-H-SIM-Yellow	Master Switch 1 Pole with Dimming Memory	Yellow
IS-H-SIM-Black	Master Switch 2 Pole with No Dimming memory	Black
IS-H-SIM-Green	Master Switch 2 Pole with Dimming Memory	Green
IS-H-4WC	4 Way Multi Port Connector	

Environmental

Parameter	Min	Max
Operating Temp	-10C	40C
Non Operating Temp	-40C	100C
Storage temperature	-40C	100C
Non Operating humidity	0%	95%
Operating humidity	0%	85%

Description of Pole Switch Options

Single pole retractive switch

The unit reacts to a one pole switch by toggling the on/off state in response to momentary switch presses and by executing a cyclic up-down fade for as long as the switch is held depressed.

Two pole retractive switch

If the two pole switch has been specified, one pole will operate as on/fade-up and the other will operate off/fade-down.

Installation, 1-Pole Retractive

- Connect Yellow wire to the 'COM' terminal
- Isolate the White – No connection
- Connect Mauve/Violet wire to the 'Switched' terminal
- Connect the RJ11 socket to the iCon Bus

With a one pole retractive switch the MAUVE wire should be connected to the normally OFF terminal. It would be good practice to insulate the unused WHITE wire if not already done.

Installation, 2-Pole Retractive

- Connect Yellow wire to the COM terminal
- Connect White wire to the ON/UP terminal
- Connect Mauve/Violet wire to the OFF/DOWN terminal
- Connect the RJ11 socket to the iCon Bus

In the UK the MAUVE wire should be assigned to the 'upper' side of a two pole retractive switch since this is normally regarded as the OFF switch, but this choice depends on national preferences. If the switch function is reversed you may have fitted the switch upside down, simply rotate the switch plate through half a turn.

Mechanical

