Introduction to Whitecroft Link

The Whitecroft Link lighting control system comprises of a comprehensive range of occupancy sensors, LCM's and lighting control equipment designed to provide optimum lighting conditions, controllability and flexibility for projects of any size.

Whitecroft Link is a scaleable system, this can be as simple as a stand alone LCM through to a fully networked bus based system which is based upon distributed intelligence using our bus power supplies. There is no central or area controllers, all intelligence is held in the local controls devices in non-volatile memory. The bus is a proprietary two-wire communications protocol that connects all controls devices so that they can share occupancy and control information, daylight control is independent at each sensor giving accurate local maintained illuminance. The simplicity of this control philosophy leads to a system that is extremely reliable, easy to commission and re-configure.

System reliability is supported by the optical isolation of the bus network at each device. However, this limits the extent of a basic network to 200 devices (sensors, scene plates and programmable LCMs) and necessitates the use of a Bus Power Supply our LKBPS. Larger systems can be constructed by linking our LKBPS bus power supplies together (max 99).

Control Features:

- Occupancy control, daylight control, scene control and manual control
- Corridor linking, individual luminaire control, grouped luminaire control and building wide control capabilities

Additional Equipment Features:

- AV Interface

Whitecroft Link Technical Data

Cable spec

- Bus Cable: Two-core multi-stranded twisted pair cross-sectional area *1.5mm², Unscreened, 600/1000V rated, LSOH insulated
- Spine Cable: Belden cable type 9502NH. The spine should be wired in a daisy chain - spurs from the Spine are not permitted. Maximum length = 1000m
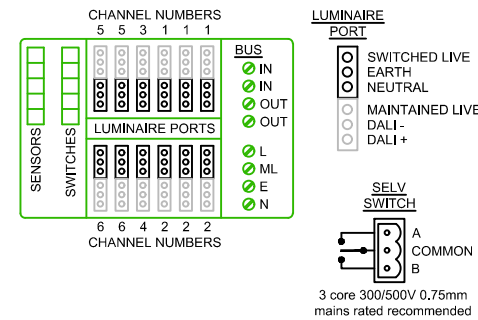
LKBPS Bus Power Supply

- Operating Voltage: 230V~
- Max linked LKBPS: 99
- Max devices per LKBPS: 200
- Dimensions: 213mm x 185mm x 117mm
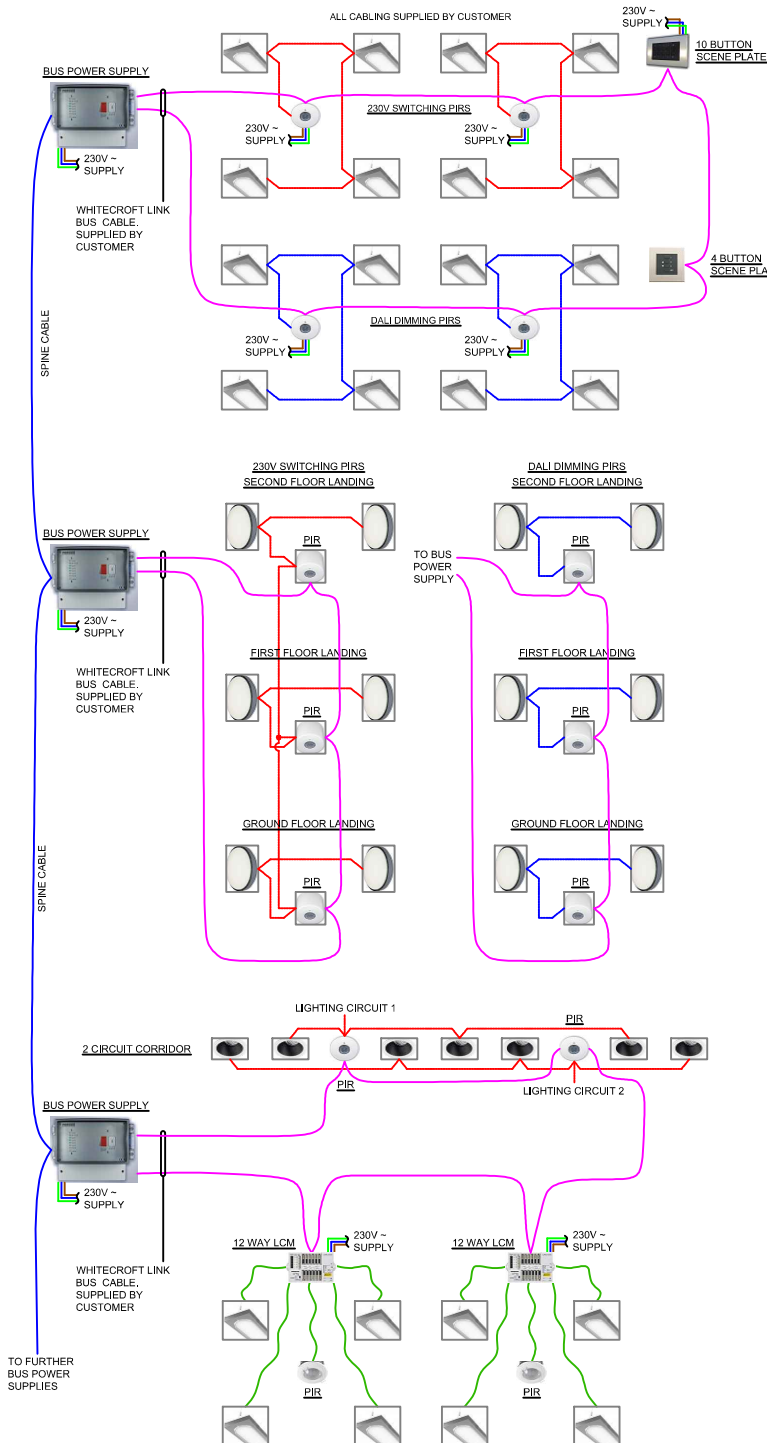- IP 65

Sensors

- Note: to create surface mount sensor order a recessed with SLPSMK surface mount kit. To create a wall mount sensor order a recessed with SLMWMK2 wall mount kit.
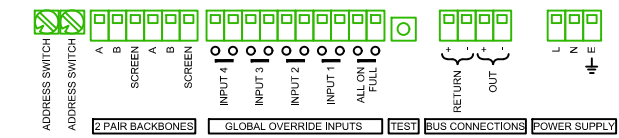
Programmable 12 port LCM

Our 12 port LCM is BUS ready, it has five SELV sensor ports (RJ45) and five SELV switch connections (screw terminals). The luminaire ports are arranged in 6 channels.

CHANNEL NUMBERS
5 5 3 1 1 1

SENSORS
SWITCHES
LUMINAIRE PORTS

6 6 4 2 2 2
CHANNEL NUMBERS

BUS
- IN
- IN
- OUT
- OUT

- L
- ML
- E
- N

LUMINAIRE PORT
- SWITCHED LIVE
- EARTH
- NEUTRAL
- MAINTAINED LIVE
- DALI -
- DALI +

SELV SWITCH
A
COMMON
B

3 core 300/500V 0.75mm mains rated recommended

Whitecroft Link Networked System

ALL CABLING SUPPLIED BY CUSTOMER

230V~ SUPPLY
10 BUTTON SCENE PLATE

BUS POWER SUPPLY
230V~ SUPPLY
230V SWITCHING PIRS
230V~ SUPPLY

230V~ SUPPLY
WHITECROFT LINK BUS CABLE, SUPPLIED BY CUSTOMER

4 BUTTON SCENE PLATE

SPINE CABLE

230V~ SUPPLY
DALI DIMMING PIRS
230V~ SUPPLY

230V SWITCHING PIRS SECOND FLOOR LANDING
DALI DIMMING PIRS SECOND FLOOR LANDING

BUS POWER SUPPLY
230V~ SUPPLY
PIR
PIR
TO BUS POWER SUPPLY

WHITECROFT LINK BUS CABLE, SUPPLIED BY CUSTOMER
FIRST FLOOR LANDING
FIRST FLOOR LANDING
PIR
PIR

SPINE CABLE
GROUND FLOOR LANDING
GROUND FLOOR LANDING
PIR
PIR

LIGHTING CIRCUIT 1
PIR
2 CIRCUIT CORRIDOR
PIR
LIGHTING CIRCUIT 2

BUS POWER SUPPLY
230V~ SUPPLY

WHITECROFT LINK BUS CABLE, SUPPLIED BY CUSTOMER

12 WAY LCM
230V~ SUPPLY
12 WAY LCM
230V~ SUPPLY

TO FURTHER BUS POWER SUPPLIES
PIR
PIR

LKBPS Bus Power Supply Terminations

ADDRESS SWITCH
ADDRESS SWITCH
A
B
SCREEN
A
B
SCREEN
INPUT 4
INPUT 3
INPUT 2
INPUT 1
ALL ON FULL
RETURN
OUT
L
E
N

2 PAIR BACKBONES | GLOBAL OVERRIDE INPUTS | TEST | BUS CONNECTIONS | POWER SUPPLY

Global Override Inputs

Our LKBPS Bus Power Supply has five pairs of switch input terminals, compatible with Latching n/o or retractive push to make switches.

All on Full: When the switch is made all devices on the bus turn on. When release devices go to their entry scene and time out.

Input 1: Emergency Test; when the switch is made our bus linked Whitecroft Link programmable LCM's will drop their connection to the maintained live. Please Note: where self test fixtures are being used please consult manufacturers datasheets for compatibility.

Input 2: Load Shed 2; when the switch is made all devices programmed to 'Global Address 2 Rx: YES' will turn off. When the switch is released the devices will remain off in standby mode awaiting occupancy.

Input 3: Load Shed 1; this is as Load Shed 2 but for 'Global Address 1 Rx: YES'

Input 4: LCM Reset; when the switch is made this will simulate an override off on any bus linked LCM that has a switch hard wired to it. If area occupied via presence/absence detectors the lights will be held on.