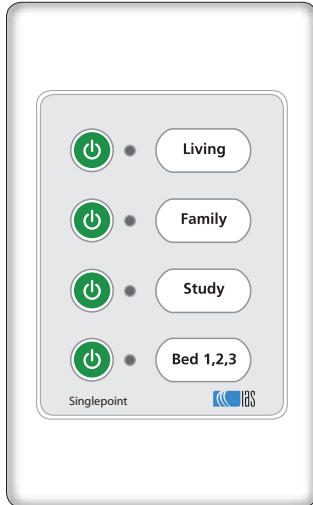


D-SPX-2

D-SPX-3

D-SPX-4

INSTALLATION MANUAL



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THE SINGLEPOINT CONTROLLER

Singlepoint is an economical, easy to install wall controller that operates independently of the air conditioning plant to provide on/off zoning control for two to four zones.

Features include:

- Integrated sensor or optional remote room sensor (not included)

Select the integrated sensor or the optional remote room sensor.

- 24 VAC power supply

Offers substantial savings in installation costs compared to 240VAC systems.

- LED zone status indication

Tell at a glance if the zone is switched on or off.

- InnoCAB quick connect cabling

Plug in connections to zone motor.

- Over current indication and protection for motor output

May indicate cable short circuit, or too many motors connected to output.

Operating Instructions

Press the green power button to activate the respective zone. The green LED will illuminate to indicate that that zone is active.

If the spill zone option is set and all zones are turned off, zone 1 will automatically open and the LED will illuminate to provide the spill function.

System Overview

The Singlepoint Zoning System is available in 2, 3 and 4 zone configurations and comprises of at least one of each of the following components.

- Singlepoint Touchpad (D-SPX-#)
= the number of zones the touchpad can address.
- Motorised Damper (D-MDY-ZZZ-IC)
Y = the torque rating and ZZZ = the size of the damper.
- Transformer (E-TFORM-X)

Singlepoint Touchpad

The Singlepoint touchpad is the core component of the Singlepoint Zoning System. All zone motors connect to and receive power from the touchpad. All motor connections are made with the InnoCAB cable system and a quick connect socket connection is provided for the 24V power supply.

Motorised Dampers

Motorised dampers connect to the touchpad via the zone output sockets on the back.

D-MD6-ZZZ-IC 6Nm motorised dampers MUST NOT be connected in parallel and are limited to one motor per zone output.

D-MD3-ZZZ-IC 3Nm motorised dampers MUST NOT be connected in parallel and are limited to one motor per zone output.

D-MDC-ZZZ-IC 4Nm motorised dampers may be connected in parallel with a maximum of two motors per zone output.

D-MD1-ZZZ-IC 1.5Nm motorised dampers MUST NOT be connected in parallel and are limited to one motor per zone output.

Cabling Requirements

All motor cables should be standard 6 core flat cable.

For cable termination instructions refer to page 7.

Component Positioning

The Touchpad should be mounted in a central position within the air conditioned space. Designed to be flush mounted to a cavity wall, the touchpad can be surface mounted through the use of a 15mm mounting block if necessary.

Due to the micro-processor based design, consideration must be given to sources of EMI (Electro Magnetic Interference) when positioning the touchpad. The minimum distance from the touchpad to any 240VAC cabling is 300mm.

The Motorised Dampers should be mounted in-line in the flexible duct.

Spill Zones

The jumper pin on the back of the D-SPX is used to set zone 1 as the spill zone if required. Install the jumper for spill zone operation.

Commissioning

Some of the motor sockets are not used in the D-SPX-2 and D-SPX-3 models.

On the D-SPX-2 model, only the centre two sockets are used.

On the D-SPX-3 model, the bottom socket (farthest from the power connection) is not used.

Apply power to the system and activate each zone to ensure each motor drives to the correct position. Turn all zones off to ensure the spill zone is working correctly if activated.

The green LED will illuminate to indicate that the respective zone is active.

SPX TECHNICAL SPECIFICATIONS:

Electrical Requirements

Power input to Controller 9 volt AC + 24 volt AC \pm 10%
Line frequency.....50 Hz

Environmental Requirements

Operating temperature..... 0°C to 50°C
Altitude 0 to 2000 meters
Operating Relative Humidity 10% to 80%

Avoid static electricity hazards

Avoid electromagnetic radiation sources

Avoid dust contamination

Avoid highly corrosive environments

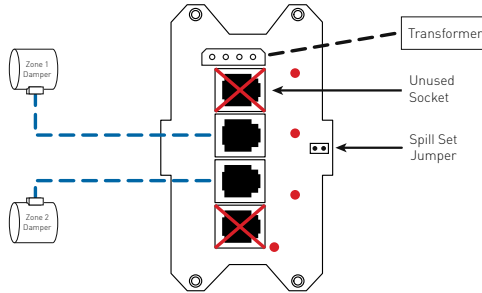
Troubleshooting Guide

Further assistance may be obtained from IAS Service and Support on 1800 354 434 if needed.

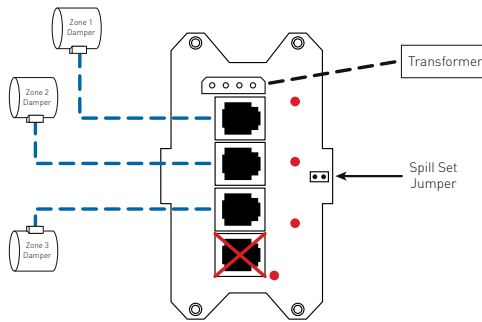
Symptom	Suggested Remedial Action
Red Fault LED is lit on motor output	Excess current draw on output. Check cables and sockets for short circuit. Check for too many motors connected to output
Motor drives the wrong way	Cable crimped incorrectly. Re-crimp one end.
Motor drives one way only	Check cable ends to ensure all pins are fully crimped. Check cable for broken wire.
Motor does not drive at all	Ensure power is connected Check that Motor is not plugged into an unused socket.
Intermittent erratic controller behaviour	Ensure the touchpad is the minimum recommended distance from any EMI source. Relocate if necessary

CONNECTION DIAGRAMS

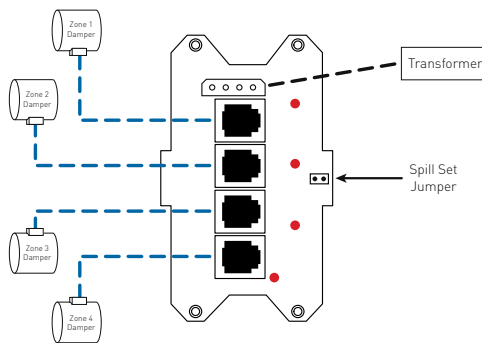
2 Zone Connections



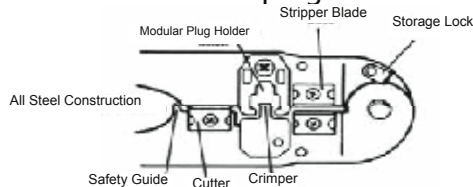
3 Zone Connections



4 Zone Connections

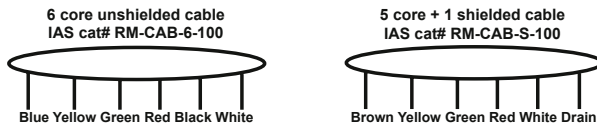


Inno-cab Cable Crimping Instructions



The Inno-cab cabling system has been developed to dramatically reduce cabling time.

The heart of the system is the Inno-cab cable. It is available with or without shielding.



IMPORTANT NOTES:

1. Inno-cab connections are polarity conscious. It is essential that every cable termination for each installation is performed with the coloured inner conductors in the same order and position in the plug. Any two cable ends should appear identical if held side by side (provided they are of the same cable type - i.e. shielded or unshielded).
2. Never insert uncrimped plugs into the sockets as this may cause damage to the socket contacts. Crimped plugs should insert easily into sockets until the locking tab clicks into place. Plugs that have been in correctly crimped may be difficult to insert and may also cause damage to the socket contacts if forced into place.

CRIMPING PROCEDURE:

1. Cut the Inno-cab cable to the desired length. Take care to ensure the ends are cut square.
2. Insert the cable between the stripper blades so that it touches the metal stop. Squeeze the handles and pull the tool to remove the cables outer sheath and expose the insulated inner conductors. Ensure the insulation on the inner conductors is not damaged.
3. Place an Inno-cab plug in the plug holder so that the front of the plug is against the stop and the gold contacts face the crimper.
4. Insert the prepared cable end into the plug with the white conductor closer to the handle. Take care to ensure the inner conductors are in the correct order and they finish flush with the tip of the gold contacts.
5. Squeeze the handles firmly (see important note above) to set the contacts and secure the cable, thus completing the operation.
6. Repeat the same procedure for each cable termination.

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