39215-173/Issue 1

SOTERIA® DIMENSION

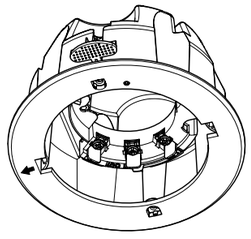
Backbox Installation Guide

Part No	Product Name
FL5000-200APO	Soteria Dimension Backbox

For all technical information please refer to the documents that follow, which are available from www.apollo-fire.co.uk:

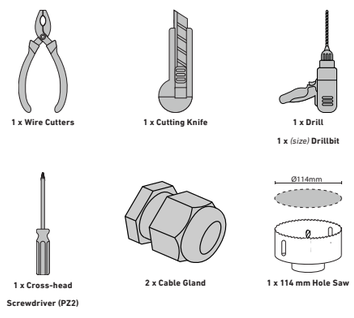
PP2550 - Soteria Dimension Optical Detector - Datasheet
PP2090 - Short-Circuit Isolator - Datasheet

What's in the Box:

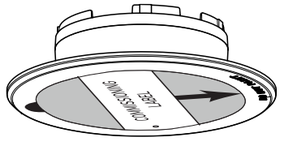


1 x FL5000-200
Soteria Dimension Backbox

Equipment Required:



Compatible Detectors:

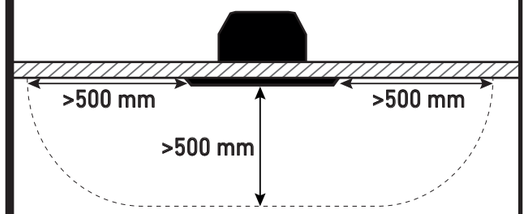


1 x FL5100-600
Soteria Dimension Optical Detector

1 x FL6100-600
Soteria Dimension Specialist Optical Detector

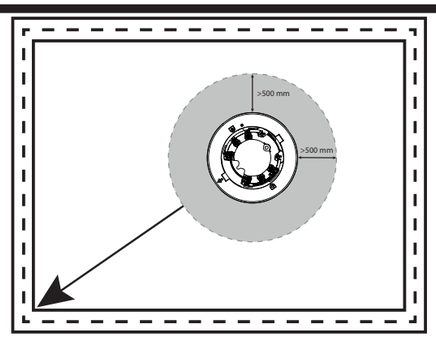
Correct Siting Requirements:

1



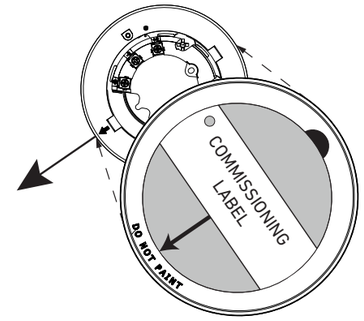
⚠ Ensure that there are no objects within 500 mm of this clearance (e.g. tops of doors, aircon vents, light fittings etc)

2

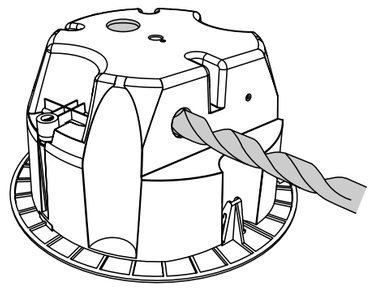


⚠ Position backbox arrow towards the longest clear line of sight which is free from any ceiling obstructions

3

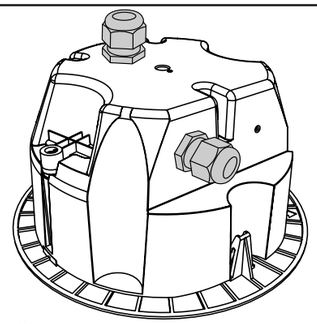


4



⚠ Take care not to damage the connector ring or rest of the backbox when making holes

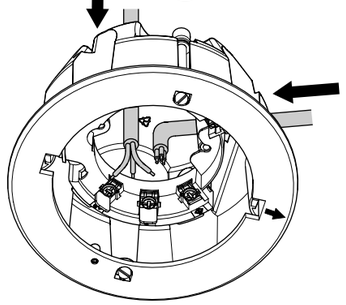
5



ⓘ Example of top and side entry

6

ⓘ Example of top and side wiring entry



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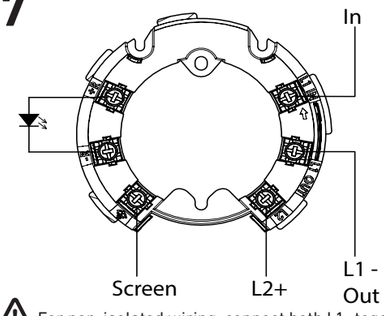
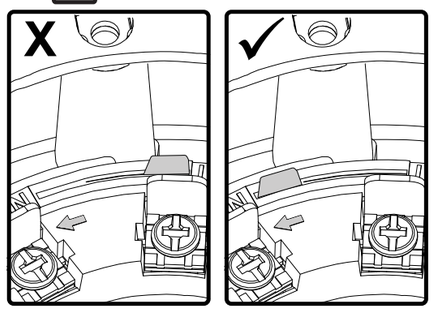


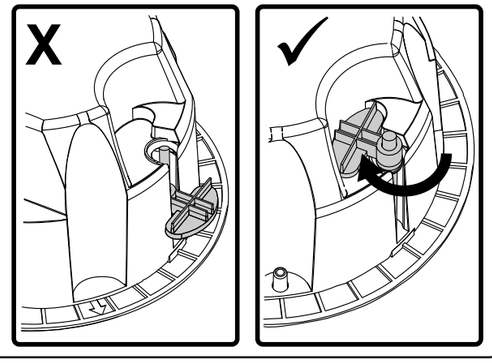
⚠ For non-isolated wiring, connect both L1- together in either In/Out terminals

8

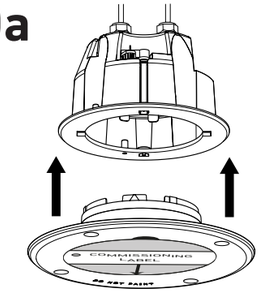
⚠ Correct continuity link position



9

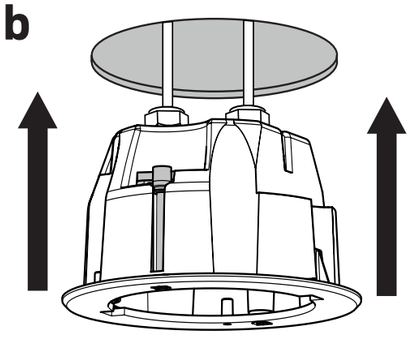


10a

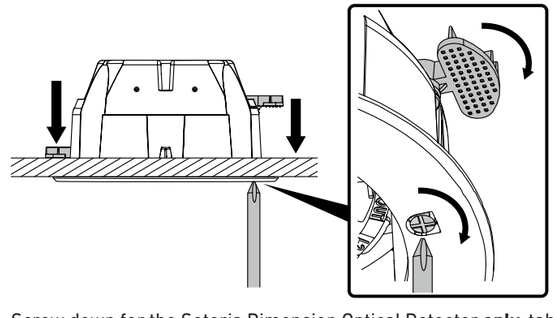


ⓘ This step is for the Soteria Dimension Specialist Optical Detector **only**

10b



11



ⓘ Screw down for the Soteria Dimension Optical Detector **only**, tabs are not needed for the Specialist variant

Detector Location

Correct alignment of the detector can be done by positioning the arrow marked on the backbox with the longest clear line of sight which is free from any ceiling mounted obstructions. The commissioning label present on the faceplate of the detector should line up with the backbox arrow when fitted.

Refer to Steps 1 - 3 for best practice

Necessary Requirements:

- Always maintain the minimum clearance of 500 mm in all directions (Step 1)
- Position backbox arrow towards the longest clear line of sight which is free from any ceiling obstructions
- Only remove commissioning label, on commissioning the system
- Not to be used outside

The commissioning label is used to aid installation, to shield from dust and to protect the lenses from fingerprints. It must only be removed upon commisioning of the system, as leaving the label on will report a fault to the panel.

Commissioning

The installation must conform to BS5839–1 (or applicable local codes). Because of the way Soteria Dimension works, it is imperative that the windows are kept free from damage, scratches, dirt and fingerprints. The commissioning label present on the faceplate of the detector must not be removed before any installation work is carried out. Before commissioning please remove the label and ensure the windows are free from fingerprints, residue and dirt.

Maintenance & Cleaning

Maintenance should be performed in accordance with applicable local codes. Clean the detector with a dry, lint-free cloth. Ensure the fire system is suitably isolated before cleaning detectors.

Testing

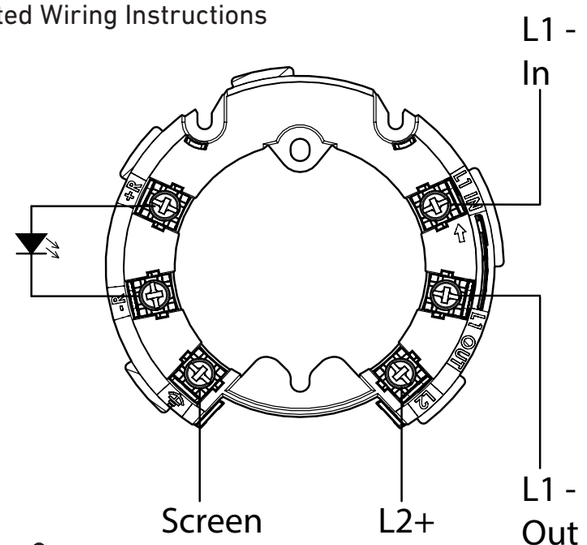
The preferred method of testing the detector is with a Solo 365 using a special Solo 367 adapter, the process is described in the test equipment's installation guide. We recommend cleaning detectors after testing using a dry lint-free cloth. For more information visit www.apollo-fire.co.uk

The new FasTest® mode (***CoreProtocol® only***) facility on Soteria Dimension Optical Detector, which can be enabled on a compatible fire control panel, facilitates quicker testing of detectors with appropriate test equipment. The FasTest disables both a portion of the signal processing algorithm and proximity sensing to allow for a faster detector response, whilst ensuring that the detectors absolute sensitivity remains identical to that of mode 3 (refer to Operating Modes Table). This helps to reduce commissioning time.

Troubleshooting

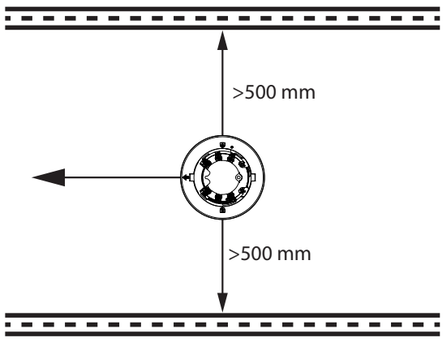
Before investigating individual units for faults, it is important to check that the system wiring is fault free. Earth faults on data loops may cause communication errors. Many fault conditions are the result of simple wiring errors. Check all connections to the unit.

Isolated Wiring Instructions



For non-isolated wiring, connect both L1- together in either In/Out terminals

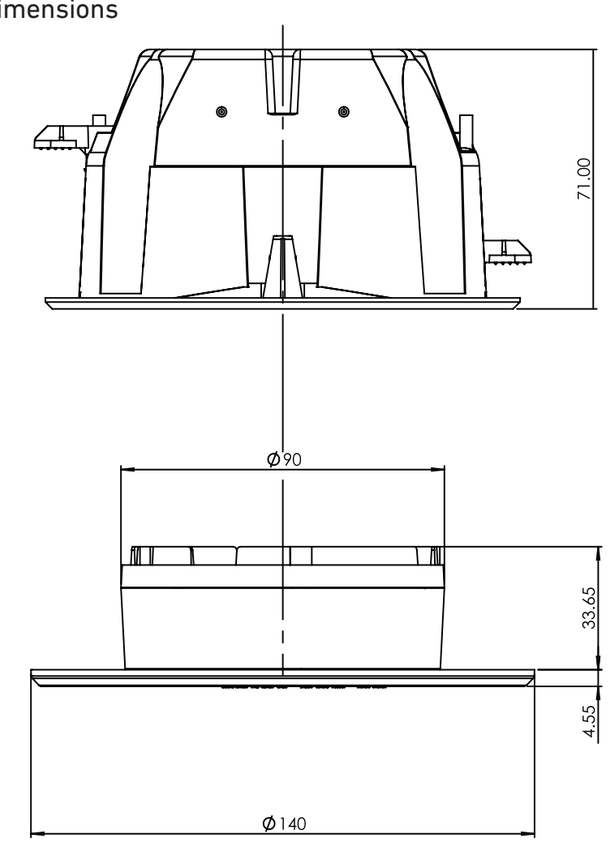
Alignment in Corridor



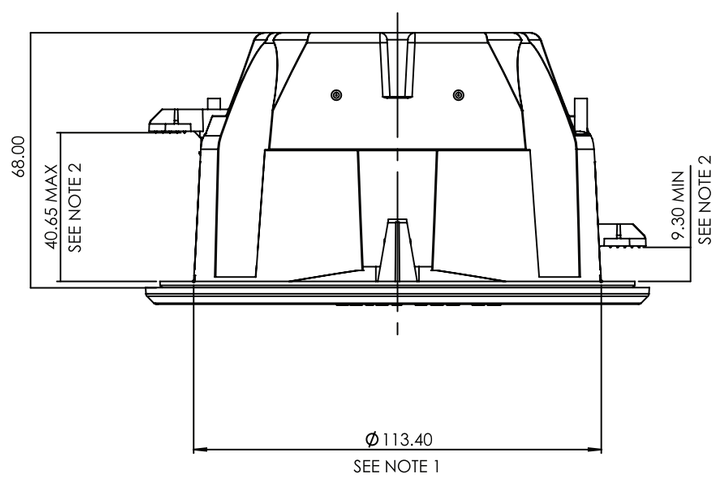
Position backbox arrow towards the longest clear line of sight which is free from any ceiling obstructions

Problem	Possible Cause
No response or missing address	Incorrect address setting Incorrect loop wiring
Fault condition reported	Object blocking windows Proximity fault Commissioning label left on
Drift warning or fault	Contaminated windows Incorrect detector orientation
Analogue value unstable	Dual address Loop data fault, data corruption
Constant alarm or pre-alarm	Contamination build-up on windows Obscuration of windows
Isolator LED on	Short-circuit on loop wiring Wiring reverse polarity Too many devices between isolators

Backbox Dimensions



EXPLODED VIEW OF DETECTOR FITTED & BACKBOX



DETECTOR FITTED TO BACKBOX

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