



PRODUCT INFORMATION SHEET

PANACHROME 2D

Panachrome is the revolutionary new lift safety detection system offering maximum passenger protection. The traditional infra-red light curtain is coupled with coloured indicators that operate on door movement. The detectors will illuminate green if the doors are opening, flash red as they start to close, and stay red as the doors move together.

The combined system is an effective solution for sites where extra caution is required on lift entry, for example; rest homes, hospitals and public access buildings.

- ✓ Complies with EN81-70 legislation - Disability Discrimination Act
- ✓ Coverage exceeds minimum requirements of 25mm to 1800mm
- ✓ Coloured red/green indicators to highlight door movement
- ✓ Infra-red detection delivered as 154 beam light curtain
- ✓ 4m pluggable cable
- ✓ 6m range
- ✓ 10mm + 43mm profiles available
- ✓ Simplified installation
- ✓ Can be used on centre-opening and side-opening doors
- ✓ IP rating of IP55 and IP65 for detectors

1. VISUAL INDICATORS

The coloured indicators are evenly spread throughout the detector edge to display green on opening, and flash red when the doors are starting to close. This changes to solid red as the doors move together, and the lights are switched off after door closure.

The visual indicators can be switched off on one side if required, to accommodate a side-opening door.

2. INFRA-RED CURTAIN

A curtain of 154 beams operates between the car doors to prevent passengers becoming trapped between the closing doors. See Fig A.

Features:-

(i) Auto-Compensating Gain Control

No adjustments required when installing, simply 'plug and play'

(ii) Power Reduction Function

This patented software feature prolongs the lifespan of the detectors by automatically putting them into stand-by mode when the lift is not in use

(iii) Diagnostic Display

7 segment LED display showing controller status or fault code

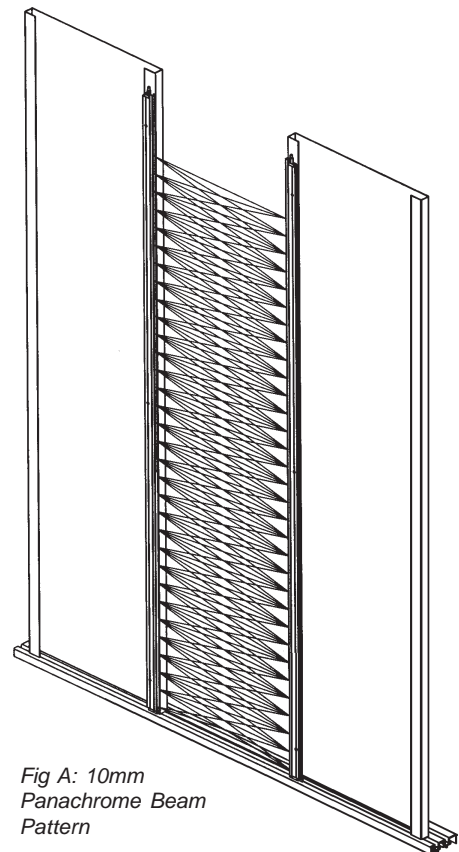


Fig A: 10mm
Panachrome Beam
Pattern

(iv) Timeout Function

This software feature allows up to 5 non-adjacent light-curtain diodes to be ignored if they are permanently obstructed. It is automatically activated after an adjustable delay if a beam is permanently blocked. This is a useful service feature which enables detectors defaced by vandalism to continue working while arrangements are made to replace them.

(v) Buzzer

A buzzer can be enabled through a switch in the controller to sound on detection.

3. INSTALLATION

The Panachrome system comprises one pair of detectors (one each of Transmitter and Receiver), a controller and 2 connecting cables.

Mount the detectors as shown in Fig B. The detectors must be mounted with the Transmitter on the left hand, and the Receiver on the right hand door when viewed from the landing.

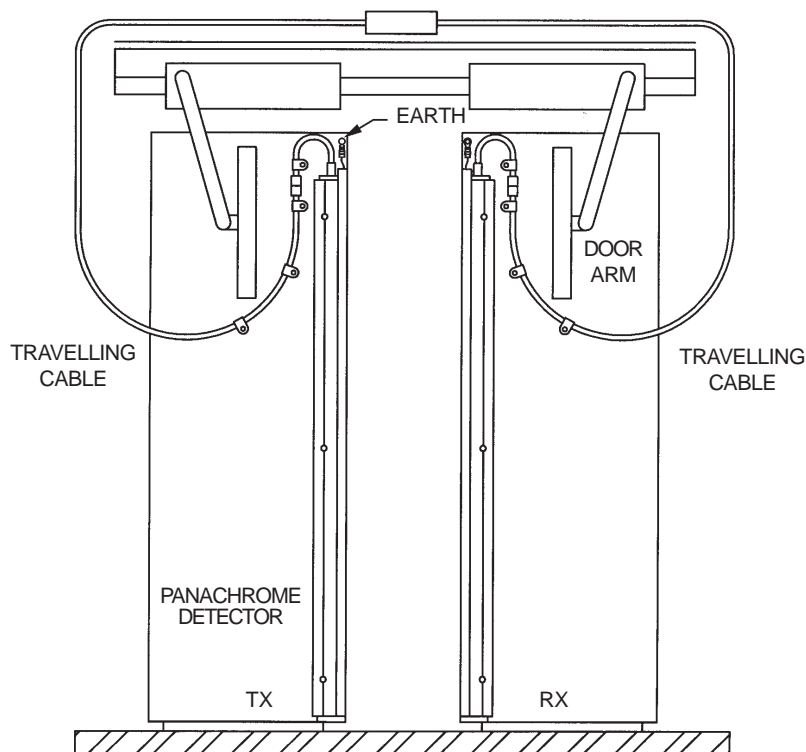


Fig B: Detector Installation

Panachrome Detectors

10mm profile

The detectors are 10mm wide which allows them to be fitted to virtually all lifts. They are simply mounted using countersunk headed self-tapping screws, see Fig C, or with a fixing clamp plate, see Fig D. (This is used where there is insufficient reach for standard fixing method).

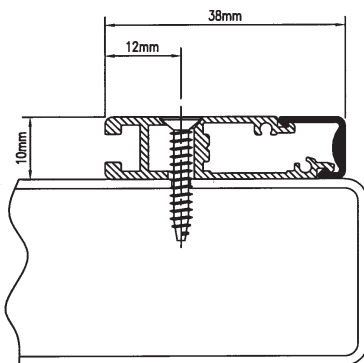


Fig C

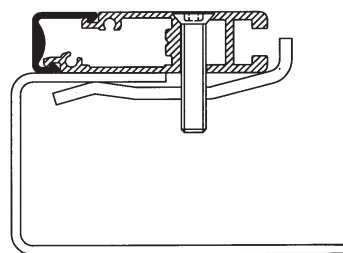
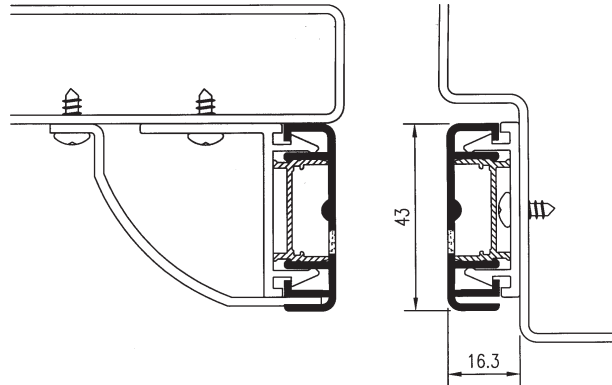


Fig D

43mm profile

For installations with a wider sill arrangement, the 43mm wide Panachrome is ideal. Fixings for two door types are included as standard; centre-opening using 2 "L" brackets or side-opening using an "L" bracket and a slampost bracket. See Fig E. The detectors are fixed to the doors using self-drilling screws.

Fig E



Installation Features:

- ✓ Dynamic fixing of the antennas
- ✓ Can be used on side-opening and centre-opening doors
- ✓ Mixed fixing possible (visible light can be suppressed on either antenna)
- ✓ Screws for standard fixing or optional clamps
- ✓ Separate, pluggable cable tested at >50 million cycles
- ✓ Controller on the top of the car
- ✓ Pluggable connectors for easy wiring

Each antenna is wired to the control box through a 4m extension cable equipped with plugs at each end. This allows an easy connection and minimises mis-wiring problems.

The standard control box can be supplied both with 230V AC and 18-25V DC. Other models are available for 115V AC and 18-25V DC.

Visual Indicator Switching:

There are 2 different ways to switch the red indicator on closure and green indicator on opening.

1) **Automatic software switching:**

In this mode, the software integrated in the Panachrome controller can detect the door movement and changes the light colour. This solution requires no extra connections.

2) **External signals:**

In this mode, two signals (door opening and doors closing) from the lift controller or door operator change the light colour. This solution gives an optimum result especially on high-speed doors. Any available voltage 12V-230V AC or DC can be used.

Adjustments:

The following adjustments can be easily made, on site, to adapt the operation of the Panachrome light to different lift configurations.

- 1) Visible indicator switching mode for auto-switching or external signals
- 2) Permanent visible light disabling on either antenna

TECHNICAL SPECIFICATIONS

Size																										
Panachrome C2510 Detectors	10mm x 38mm x 2000mm																									
Panachrome C2540 Detectors	43mm x 15mm x 2000mm																									
Panachrome C2850 Controller	250mm x 206mm x 59mm																									
Ext. Cables 015 455 (2 cables req'd per set)	4m																									
Packed Weights																										
Panachrome C2510 Detectors	3.3kg																									
Panachrome C2540 Detectors	6.2kg																									
Panachrome C2850 Controller inc. Extension Cables (2 per set)	2.52kg																									
Panachrome C2510 801 Fix Kit inc:	055 217 - 6 off No.6 x 20mm CSK POZI 055 223 - 12 off No.8 x 12mm S/T Pan POZI 057 029 - 2 off Shakeproof Washer M4 001 903 - 10 off P-Clip 6.4mm Ø																									
Detector Specifications																										
Diode spacing	58.5mm																									
Distance between bottom beam and bottom of housing	22mm																									
Distance between top beam and bottom of housing	1835mm																									
Range	6.0m																									
No. of diodes per detector	32																									
No. of infra-red beams per detector	Standard 154																									
Maximum voltage in detector	15V DC																									
Maximum power consumption TX or RX	1.7W each when visual indication turned on																									
Light Immunity	100,000 lux																									
Operating temperature range	-10°C to +65°C as per BS2011 Pt.2.1 Ab and BS2011 Pt.2.2 Bb																									
EMC compliance to	Emissions to EN 12015:1998; Immunity to EN12016:1998																									
Ingress Rating	IP65 for C2510, IP55 for C2540 (IP56 available)																									
Sleep Software Patent Nos	<table border="0"> <tr> <td>UK</td> <td>9822359.7</td> <td>Patent Nos.</td> <td>Europe</td> <td>EP06966 619</td> </tr> <tr> <td>Germany</td> <td>29918009.3</td> <td></td> <td>USA</td> <td>5,698,824</td> </tr> <tr> <td>Japan</td> <td>291527/1999</td> <td></td> <td>Japan</td> <td>3088936</td> </tr> <tr> <td>USA</td> <td>09/416,585</td> <td></td> <td>Canada</td> <td>2,153,514</td> </tr> <tr> <td></td> <td></td> <td></td> <td>Singapore</td> <td>116374</td> </tr> </table>	UK	9822359.7	Patent Nos.	Europe	EP06966 619	Germany	29918009.3		USA	5,698,824	Japan	291527/1999		Japan	3088936	USA	09/416,585		Canada	2,153,514				Singapore	116374
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Controller Specifications																										
Voltage requirements	195-265V AC or 93-127V AC, 50-60Hz depending on Model ordered - see below. 18-25V DC alternate source																									
Power consumption	8VA maximum with detectors fitted, visual indication on																									
Door operator relay	250V AC, 24V DC at 5A																									
Case Material	Epoxy Painted Mild Steel																									
Trigger Duration	250mS typical																									
Timeout	Switched ON/OFF 10-70 seconds adjustable																									
Visual Indication trigger input	12V to 230V, AC or DC. Jumper selectable for rising or falling edge voltage range of signal																									

Part Nos	Ordering Information
C2510 000	Set of TX, RX Detectors and Fixing Kit 10mm
C2510 001	Transmitter Detector (TX) 10mm
C2510 002	Receiver Detector (RX) 10mm
C2540 000	Set of TX, RX Detectors and Fixing Kit 43mm
C2540 001	Transmitter Detector (TX) 43mm
C2540 002	Receiver Detector (RX) 43mm
C2510 803	Clamp Kit to fit one Detector
C2850 000	Panachrome Controller, 2D, Universal

As a result of our policy of continual improvement, the information in this document is subject to change without notice and it is intended only as general guidance on product performance and suitability. This information shall not form part of any contract.

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