



Universal
Controller
Part No C3850



INSTALLATION SHEET

SHEET NO. C3850 855

ISSUE 2

The Panachrome 3D Controller C3850 is designed to operate with Panachrome 3D detectors, e.g. C3540, C3510. Check you have the correct items.

Controller Installation

Position the controller in a suitable place on the roof of the lift car, and fix using 4 off No.8 screws.

Signals from lift required:

Power supply - AC supply voltage between 85 to 240V AC.

Alternatively, 18-25V DC.

Relay 1 output - a changeover relay provides the signal to the lift controller to re-open the doors.

VISUAL INDICATION

There are 2 options available to initiate the visual indication of door movement:

- a) Automatic (Factory-set default position)
As the doors move, the system detects the motion causing the LEDs to flash red on closure, or illuminate green on opening. No additional wiring to the lift controller is then required. Switching delays vary according to door movement speeds and if the visual delay is not practical, then the installer should consider the external signalling method [see b) below].

Nudging

When the Panachrome is used in Automatic mode and the elevator controller provides a nudging facility, then the nudging control signal can be connected to the Panachrome CLOSING input. This will ensure that when the doors close under nudging control the Panachrome display remains RED, even if the detectors are triggered. The polarity of the nudging control signal can be changed by setting switch 6 number 3 (SW6/3).

- b) External Signal:
Signals are required from the door operator/lift controller to switch the LEDs to red or green. Voltages of between 12V and 230V AC/DC from the door open and door close contactors are connected to the input of the Panachrome controller. Refer to Table below for details.

Note: The voltage on the inputs must never exceed 250V. Beware of voltage transients which may exceed this (e.g. from relay coils). If necessary, fit appropriate suppression or snubber device.

For external signal activation, SW6/3&4 must be set according to whether the voltage will rise or fall when the signal from the controller is applied. If the voltage rises when the doors move, then set SW6/4 on (Opening) SW6/3 (Closing). If the voltage is normally present, and falls when the doors move, then set these switches OFF.

External signal activation provides the quickest response to indicate door movement.

Switch Settings

3D control is split between SW4 in tables 2 & 3 and SW5 in Table 1.

SW5	3D Control	Functions
	OFF	ON
7	Normal 3D	Adaptive 3D
8	2D detector fitted (C2540/C2510)	3D detector fitted (C3540/3510)
SW5	2nd Relay	Functions
	OFF	ON
1	Function disabled	Canadian timeout mode enabled
2	Function disabled	2nd relay operates on 3D trigger
3	Function disabled	2nd relay operates with main relay (RL1)
4	Function disabled	2nd relay operates on system fault
5	Function disabled	2nd relay operates on 2D trigger longer than timeout period
6	Function disabled	2nd relay operates as SW5/5 above plus timed out 2D beam
SW6	Visible Display	Functions
	OFF	ON
1	Visual display OFF	Visual display ON
2	Wired, external signal, LED activation	Automatic visual LED activation
3	Closing, external signal FALLS	Closing, external signal RISES
4	Opening, external signal FALLS	Opening, external signal RISES
5	NORMAL display mode	TEST/DEMO display mode
6	Unused	
7	Unused	
8	Unused	

Table 1

The label inside the lid has further details on positions and settings of the switches.

Adaptive Software

The Panachrome 3D controller can be configured to operate with special “adaptive” software.

In certain environments, the amount of light scattered from surfaces (e.g. marble floors, mirrored walls or within the detectors), may cause false 3D triggers. The adaptive software option allows the system to automatically sense this background level and adjust the trigger threshold appropriately. This is done by setting SW5/7 ON.

In environments where the amount of scattered light is low, then superior 3D performance can be obtained by turning the adaptive software off. This is done by setting SW5/7 OFF.

Memco recommends the following settings:-

C3510	Adaptive control off	SW5/7 OFF
C3540 from 2007 on	Adaptive control off	SW5/7 OFF
C3540 pre 2007	Adaptive control on	SW5/7 ON

3D Switch Settings (SW4)

3D Operating Mode	Switch 1	Switch 2
'As Doors Close'	OFF	OFF
'At 800mm'	OFF	ON
'3D Timeout – 20 seconds'	ON	OFF
'3D Timeout – 10 seconds'	ON	ON

Table 2 - 3D Operating Mode

3D Sensitivity	Switch 3	Switch 4
Highest	ON	ON
Intermediate	OFF	ON
Normal	ON	OFF
3D detection	OFF	OFF

Table 3 - 3D Sensitivity

Jumper Settings

Jumper	Jumper Fitted	Jumper Removed
J10	Enable Visual LED indication in TX	Disable Visual LED indication in TX
J11	Enable Visual LED indication in RX	Disable Visual LED indication in RX

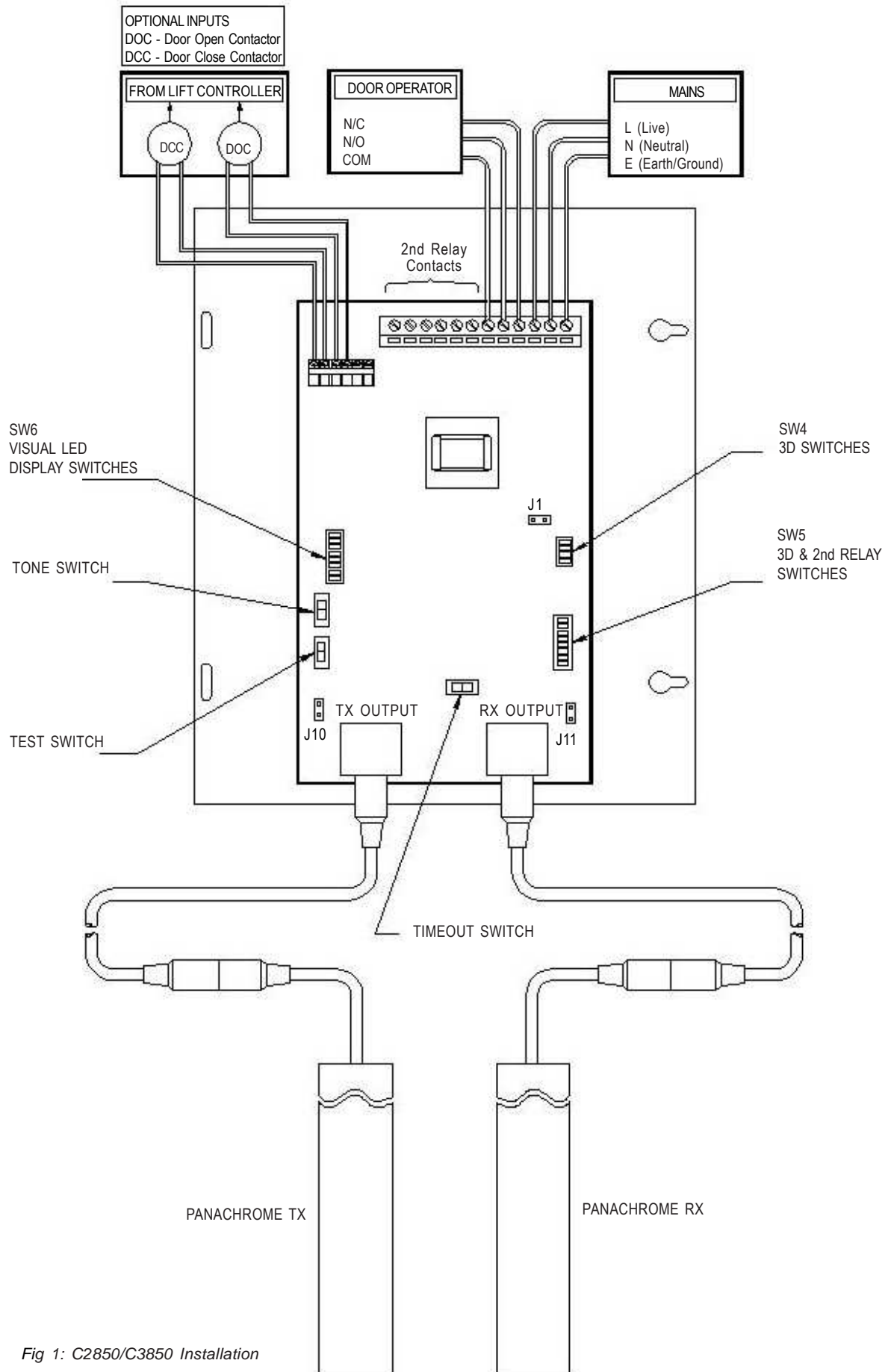


Fig 1: C2850/C3850 Installation