4100ES-S1
Brigade Interface Door Kit
INSTALLATION INSTRUCTIONS

These instructions cover fitting and wiring of the two different brigade interface doors to the 4100ES-S1 Fire Alarm System.

KIT CONTENTS

FP0935   FP,4100ES-S1 1976-174,ASE DOOR KIT
   1 x 4U hinged door, with ASE cover and barrel nuts already fitted
   1 x 3 way connector and 1 x 2 way connector for connection to the ASE when it is fitted
   1 x FP0740 FAS interface module with red, yellow, blue and white wires
   1 x pair of red and black wires for connecting the ASE to the 4100U-S1 DC supply
   4 x M6 screws, washers and cage nuts for mounting the door
   5 x Cable ties and adhesive cable tie holders for fastening the ASE wiring
   1 x green earth lead + nut and washers to earth the door to the expansion bay
   2 x M4 x 16 screws and crinkle washers to mount the ASE to the door
   2 x ASE TNC Connect Insulation Bush to mount ASE Aerials
   2 x ASE TNC Connect Insulation Washer to mount ASE Aerials
   These installation instructions.

FP0937   FP,4100ES-S1 1976-174,WA/CUBE ASE DOOR KIT
   1 x 4U hinged door with spacer bracket, connector strip, label and wiring already fitted
   4 x M6 screws, washers and cage nuts for mounting the door
   5 x Cable ties and adhesive cable tie holders for fastening the WA/CUBE ASE wiring
   1 x green earth lead + nut and washers to earth the door to the expansion bay
   4 x 3/8" PK screws for mounting the CUBE ASE on the spacer bracket
   4 x 25mm male/female barrel nuts for the WA/CUBE ASE mounting option
   4 x M4 x 10 screws with washers for mounting the WA ASE on the spacer bracket
   3 x 15K resistors
   These installation instructions and literature LT0316.

DOOR MOUNTING
Both types of brigade doors mount in the 4 unit space at the bottom of the 4100ES-S1 cabinet, using 4 x M6 screws, washers and cage nuts. Cage nuts should already be fitted to the 4100ES-S1 and screws supplied with it, but there are spare screws, washers and cage nuts supplied with this kit in case the others have been lost.

GENERAL WIRING
The WA/CUBE ASE should be powered from the fused DC distribution board on the power supply. It is recommended that the brigade device does not share its fuse protection with any other equipment, for reliability.
The wiring between the brigade device and the 4100ES-S1 should be routed neatly as shown in the following drawings, and secured in place with the cable ties and adhesive tie holders supplied with the kits.
Fit the protective earth lead between the quick-connect tap on the brigade interface door and an unused stud in the lower right end of the expansion bay, using the nut and washers supplied with this kit.

WA/CUBE ASE MOUNTING
The WA ASE (Code Red III) or CUBE ASE must be obtained separately. The FP0937 brigade interface door is supplied assembled ready to take an WA ASE, which is fastened directly to the spacer bracket by four screws supplied with the kit. To mount a CUBE ASE, the spacer bracket must be removed and reassembled using the extra 25mm male/female barrel nuts supplied according to drawing 1976-174 sheet 5 on page 3. The CUBE ASE is fastened directly to the spacer bracket using four 3/8" PK screws supplied with this kit.

WA/CUBE ASE WIRING
For the WA ASE the pre-fitted wiring must be connected to the 4100ES-S1's Alarm Relay terminals as shown in 1976-174 sheet 5 on page 3. For the CUBE ASE the FP0740 FAS Interface Module connects to the 4100ES Alarm Relay Card. Set the three links on the 4100ES Alarm Relay card to the NO positions for a WA ASE and the NC positions for a CUBE ASE.
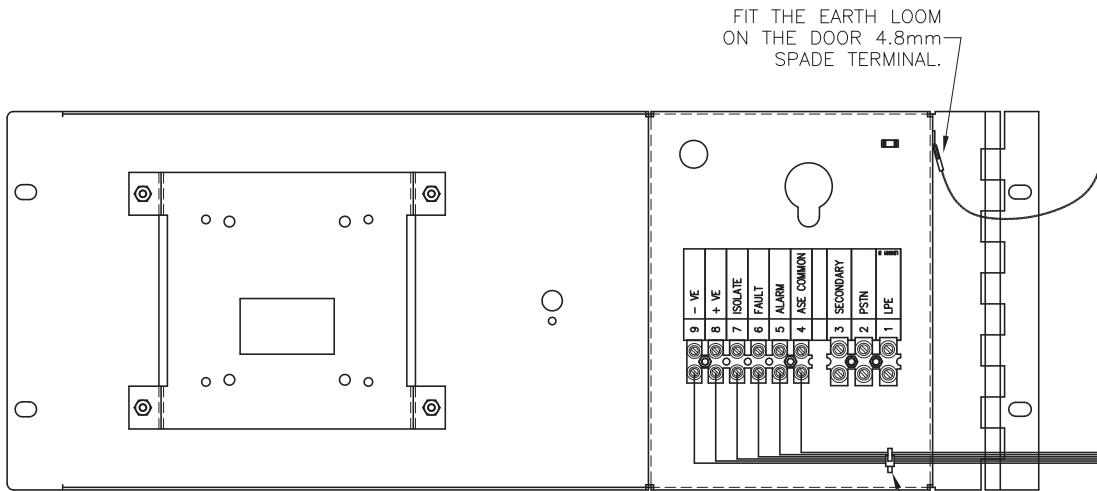
CENTAUR II ASE MOUNTING
The ASE unit must be obtained separately. If it is supplied complete with a body, this must be removed before fitting the ASE to the door. The ASE is fastened to the brigade interface door with the two M4 screws and crinkle washers in the kit. The antenna socket should be fitted to the tab on the door below the ASE position. See drawing 1976-174 sheet 1 on page 4 and the ASE installation instructions for details.

CENTAUR II WIRING
The FP0740 ASE FAS module must be connected to the 4100ES-S1's Alarm Relay terminals and the 2 way ASE connector as shown in 1976-174 sheet 1 on page 4. Set the three links on the Alarm Relay card to the NC positions.

WIRE 4U WA/CUBE ASE DOOR
TO SPS BRD AND RELAY
BRD AS PER DRAWING
1922-96 SHEETS 1 & 2.

RELAY
CARD

Emergency Operating Instructions

FIT THE EARTH LOOM
ON THE DOOR 4.8mm
SPADE TERMINAL.

FIX M4 LUG END OF
THE DOOR EARTH LOOM
TO BAY 6/32 UNC STUD
WITH 6/32 NUT AND M4
SHAKEPROOF WASHERS
SUPPLIED.

P1
P2
P3

9 − VE
8 + VE
7 ISOLATE
6 FAULT
5 ALARM
4 ASE COMMON
3 SECONDARY
2 PSTN
1 LPE

FIT 4U DOOR EARTH
LOOM TO BAY 6/32
UNC STUD.

INSTALLATION WIRING

SECURE WIRES TO DOOR
USING CABLE TIE HOLDER
IN METALWORK & SU0020,
1 PLACE.

NOTES:

1. REFER TO LITERATURE LT0316 (DRAWING 1922-96 SHEETS 1 AND 2) FOR
MORE WIRING DETAILS.

MOUNT ASE/MIC DOOR WITH
4 OFF M6 X 12 SCREW, (SC0058)
4 OFF FLAT M6 WASHER, (WA0008)
4 OFF M6 CAGE NUT, (NT0030).

CABINET INSTALLATION

UNLESS OTHERWISE STATED: ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE. TOLERANCES ARE TO BE:
1 DECIMAL PLACE ±0.5, 2 DECIMAL PLACES ±0.3, 3 DECIMAL PLACES ±0.1

3rd ANGLE
PROJECTION

ISS/REV	AMENDMENTS	ECO	DRN	CHKD	AUTH	APVD	DATE
A	ORIGINAL	−	KJS	LSC	RC	DP	21-12-05
B	AIU BRACKET UPDATED	3810	KJS	LSC	LSC	DP	12-2-07
C	NOTE 1 UPDATED. REF TO DRG 1901-267 REMOVED.	ESC1309	KJS	GEL	RC	DP	19-11-08
D	SHEET 5 ADDED. THIS SHEET WAS SHT 3 OF 4.	ESC1309	GEL	LSC	LSC	DSCP	03-12-08
E	UPDATED FOR NEW WA ASE.	4333	KJS	YZH	RC	DP	6-3-13
F	3U ASE DOOR HINGING CHANGED.	4704	KJS	LSC	LSC	DP	19-2-15

tyco
Fire Protection Products
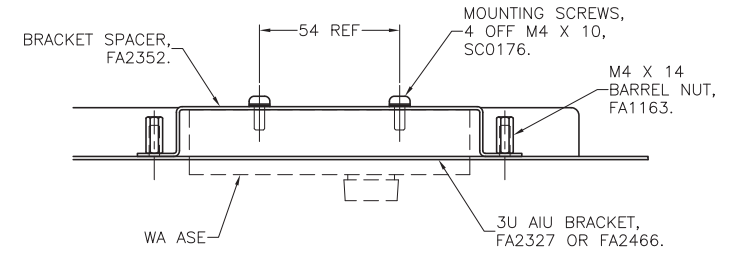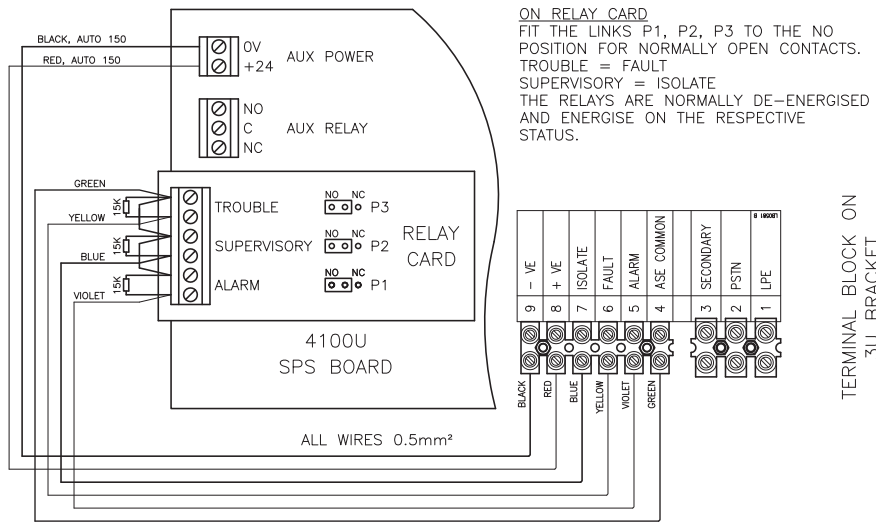
TYCO FIRE PROTECTION PRODUCTS
17 MARY MULLER DRIVE
P.O. BOX 19545
CHRISTCHURCH, PH: +64 3 3895096
NEW ZEALAND.   FAX:+64 3 3895938
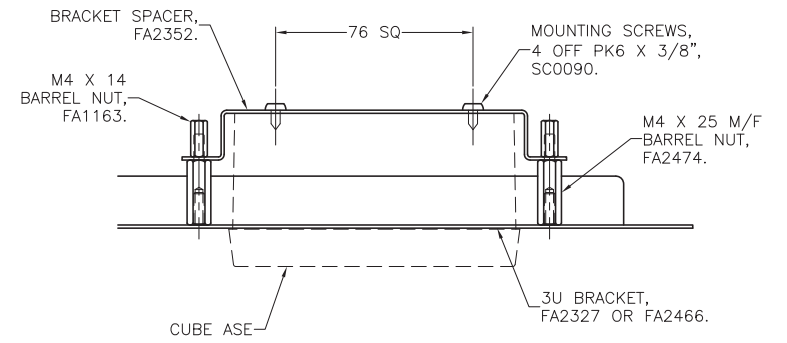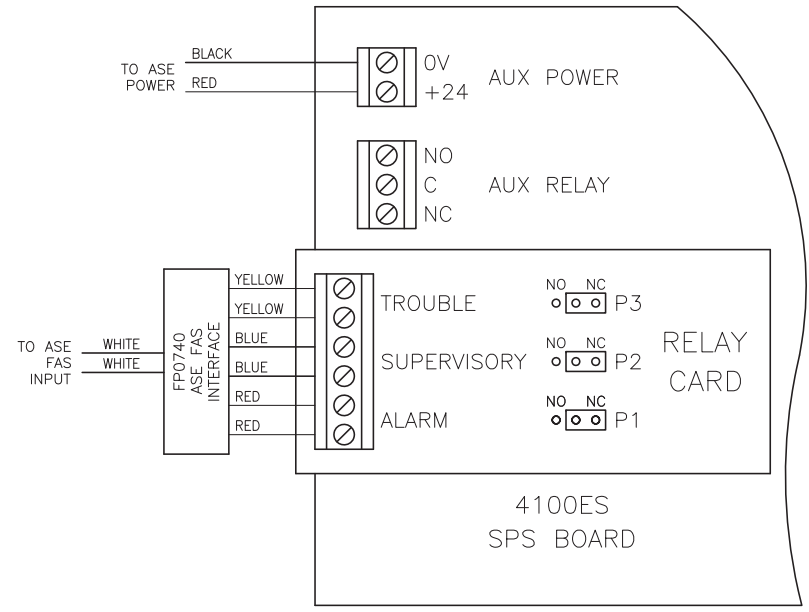
4100ES - S1
WA/CUBE ASE 4U DOOR
WIRING DETAILS

DRAWING No: 1976-174   SHEET 3 of 5

A3 | ISS/REV   F | PART No: FP0937

WESTERN AUSTRALIA ASE WIRING AND ASSEMBLY

BLACK, AUTO 150
RED, AUTO 150

0V
+24
AUX POWER

NO
C
NC
AUX RELAY

ON RELAY CARD
FIT THE LINKS P1, P2, P3 TO THE NO
POSITION FOR NORMALLY OPEN CONTACTS.
TROUBLE = FAULT
SUPERVISORY = ISOLATE
THE RELAYS ARE NORMALLY DE−ENERGISED
AND ENERGISE ON THE RESPECTIVE
STATUS.

GREEN
YELLOW — 15K
BLUE — 15K
VIOLET — 15K

TROUBLE
SUPERVISORY
ALARM

NO NC P3
NO NC P2
NO NC P1

RELAY CARD

4100U
SPS BOARD

ALL WIRES 0.5mm²

TERMINAL BLOCK ON 3U BRACKET

9	8	7	6	5	4	3	2	1
− VE	+ VE	ISOLATE	FAULT	ALARM	ASE COMMON	SECONDARY	PSTN	LPE

BLACK RED BLUE YELLOW VIOLET GREEN

BRACKET SPACER, FA2352.

54 REF

MOUNTING SCREWS, 4 OFF M4 X 10, SC0176.

M4 X 14 BARREL NUT, FA1163.

WA ASE

3U AIU BRACKET, FA2327 OR FA2466.

QUEENSLAND CUBE ASE WIRING AND ASSEMBLY

TO ASE POWER — BLACK / RED

0V
+24
AUX POWER

NO
C
NC
AUX RELAY

FP0740 ASE FAS INTERFACE

TO ASE FAS INPUT — WHITE / WHITE

YELLOW
YELLOW
BLUE
BLUE
RED
RED

TROUBLE
SUPERVISORY
ALARM

NO NC P3
NO NC P2
NO NC P1

RELAY CARD

4100ES
SPS BOARD

ON RELAY CARD
FIT THE LINKS P1, P2, P3 TO THE NC POSITION
FOR NORMALLY CLOSED CONTACTS.
TROUBLE = FAULT
SUPERVISORY = ISOLATE
THE RELAYS ARE NORMALLY DE−ENERGISED
AND ENERGISE ON THE RESPECTIVE STATUS.

BRACKET SPACER, FA2352.

M4 X 14 BARREL NUT, FA1163.

76 SQ

MOUNTING SCREWS, 4 OFF PK6 X 3/8", SC0090.

M4 X 25 M/F BARREL NUT, FA2474.

CUBE ASE

3U BRACKET, FA2327 OR FA2466.

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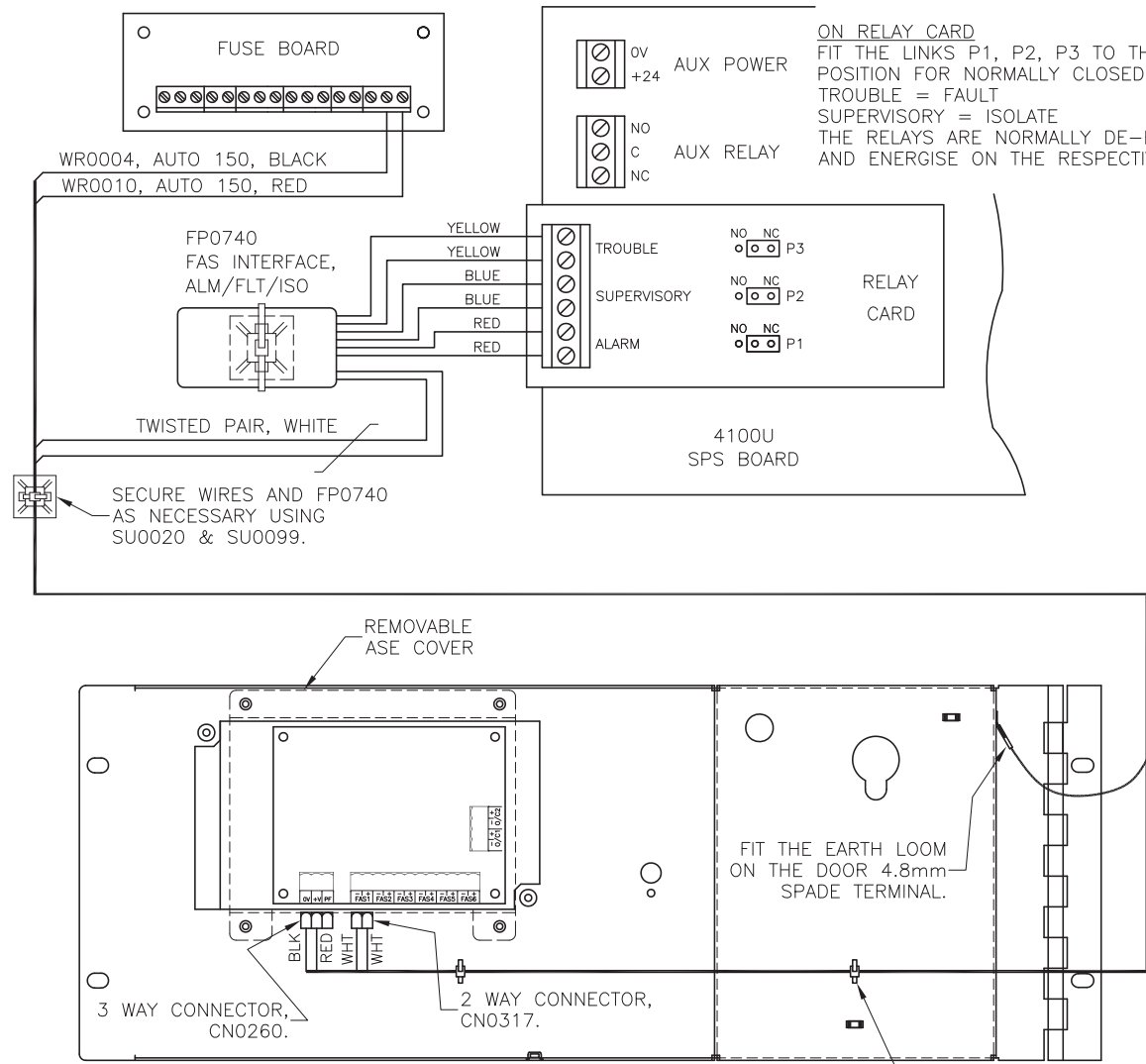
3rd ANGLE PROJECTION

4100ES − S1
WA / CUBE ASE TO SPS
WIRING DETAILS

DRAWING No: 1976-174 SHEET 5 of 5

A2 | ISS/REV B | PART No: FP0937

FUSE BOARD

WR0004, AUTO 150, BLACK
WR0010, AUTO 150, RED

FP0740
FAS INTERFACE,
ALM/FLT/ISO

TWISTED PAIR, WHITE

SECURE WIRES AND FP0740
AS NECESSARY USING
SU0020 & SU0099.

0V
+24   AUX POWER

NO
C   AUX RELAY
NC

YELLOW
YELLOW   TROUBLE   NO   NC   P3
BLUE   o o o
BLUE   SUPERVISORY   NO   NC   P2   RELAY
RED   o o o   CARD
RED   ALARM   NO   NC   P1
                               o o o

4100U
SPS BOARD

ON RELAY CARD
FIT THE LINKS P1, P2, P3 TO THE NC
POSITION FOR NORMALLY CLOSED CONTACTS.
TROUBLE = FAULT
SUPERVISORY = ISOLATE
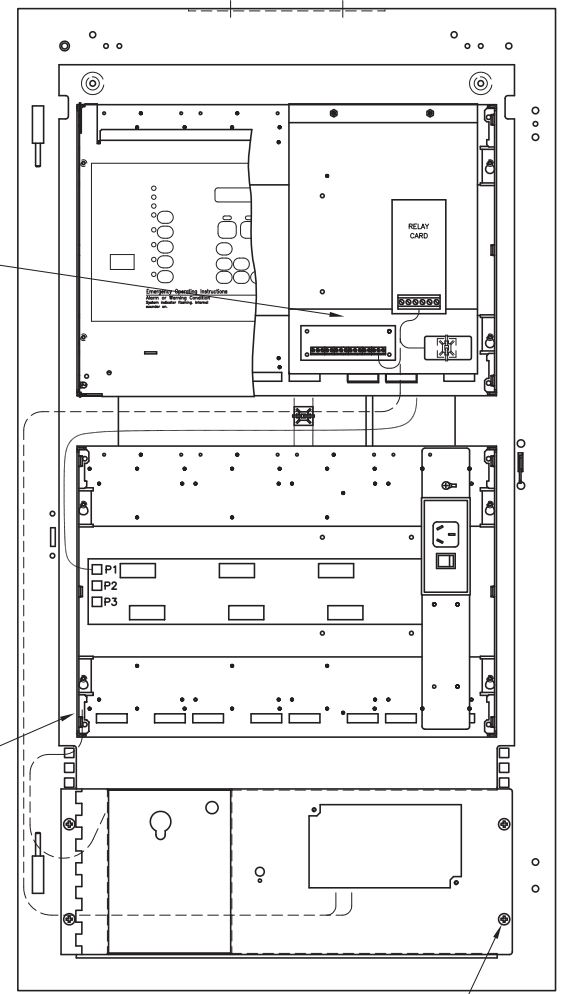THE RELAYS ARE NORMALLY DE-ENERGISED
AND ENERGISE ON THE RESPECTIVE STATUS.

WIRE 4U ASE/MIC DOOR
AND FAS INTERFACE TO
SPS BRD AND RELAY
BRD AS SHOWN.

FIX M4 LUG END OF
THE DOOR EARTH LOOM
TO BAY 6/32 UNC STUD
WITH 6/32 NUT AND M4
SHAKEPROOF WASHERS
SUPPLIED.

FIT 4U DOOR EARTH
LOOM TO BAY 6/32
UNC STUD.

RELAY
CARD

P1
P2
P3

REMOVABLE
ASE COVER

FIT THE EARTH LOOM
ON THE DOOR 4.8mm
SPADE TERMINAL.

3 WAY CONNECTOR,
CN0260.

BLK RED WHT WHT

2 WAY CONNECTOR,
CN0317.

SECURE WIRES TO DOOR
USING CABLE TIE HOLDER
IN METALWORK & SU0020,
2 PLACES.

INSTALLATION WIRING

MOUNT ASE/MIC DOOR WITH
4 OFF M6 X 12 SCREW, (SC0058)
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C	3U ASE DOOR HINGING CHANGED.	4704	KJS	LSC	LSC	DP	19-2-15

tyco
Fire Protection Products

4100U - S1
FAS INTERFACE ALM/FLT/ISO
WIRING DETAILS

DRAWING No: 1976-174 SHEET 1 of 5

A3 ISS/REV C   PART No: FP0935