4100U Fire Indicator Panel
Australian Wiring Diagrams

Australian Wiring Diagrams
LT0432
Iss 1.04
Each of these diagrams shows the wiring for a particular module or card or base which can be used with the AS4428.1 version of the Simplex 4100U Fire Alarm system.

Each diagram has a 3 digit sheet number from the drawing series 1976-181. This sheet numbering is divided into ranges, reflecting the type of device or module, as follows:

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**Abbreviations**

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<td>IDNet</td>
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<td>MAPNET</td>
<td>Multi-Application Peripheral Network – earlier version of addressable device communication.</td>
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<td>IAM</td>
<td>Individually Addressable Module.</td>
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<tr>
<td>ZAM</td>
<td>Zone Addressable Module – interfaces to conventional detectors.</td>
</tr>
<tr>
<td>RUI</td>
<td>Remote Unit Interface – connects Master panel and Slave transponders.</td>
</tr>
<tr>
<td>RTU</td>
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<td>NAC</td>
<td>Notification Appliance Circuit – drives DC-powered sounders and visual warning devices.</td>
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Nyp = not yet published
NOTES:
1. IF USED, REMOTE INDICATORS ARE POLARIZED; OBSERVE COLOUR-CODED WIRING.
2. BREAK WIRES BEFORE CONNECTING TO TERMINAL 4 OR L TO MAINTAIN SUPERVISION. DO NOT LOOP WIRE UNDERNEATH TERMINAL 4 OR L.
3. 2098-111X REMOTE INDICATOR CANNOT BE USED WITH TYCO BASES, AND E500 REMOTE INDICATOR CANNOT BE USED WITH 4098-9788EA BASES.
4. MULTIPLE BASES OF THE SAME TYPE CAN DRIVE A COMMON REMOTE INDICATOR BY LINKING BASES AS SHOWN. HOWEVER, DO NOT INTERCONNECT REMOTE INDICATOR OUTPUTS OF 4098-9788EA BASES WITH 5B (OR MUB) BASES, OR THE DETECTOR CIRCUIT WILL BE SHORT CIRCUITED.
5. WHEN USING MULTIPLE DETECTOR TYPES ON ONE CIRCUIT, THE SUM OF EACH TYPE'S QUANTITY AS A PROPORTION OF ITS MAXIMUM MUST NOT EXCEED 1, E.G. 22 X 6141 AND 16 X 4098-9603EA ARE NOT PERMITTED ON 4100-5001 AS 22/40 + 16/30 IS GREATER THAN 1.

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3rd ANGLE PROJECTION

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<td>KJS</td>
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SUPervised Circuit Rating

Standby Voltage Range at Detector... 16.5 – 32VDC
Maximum Detector Standby Load Current... 3.0mA
Maximum Alarm (Short) Circuit Current... 60mA
Maximum Line Resistance... 50 Ohms
EOL Resistance... 3300 Ohms

Notes:
1. If zone is not used, connect a 3.3K, 1W resistor across zone terminals as shown on zone 13.
2. Wire must be 0.75 SQ.mm or greater.
3. All device wiring to be terminated to the appropriate zone as shown on zone 9.
4. Conductors must test free of all grounds.
5. Each zone is marked with its circuit number, ZN1, ZN2, ZN3, ..., ZN128. Refer to "4100U Programmer Report" which references the exact wires connected, per job.
6. For zones that connect to clean contacts only, max line resistance is 800 ohms.

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1 decimal place ±0.5, 2 decimal places ±0.3, 3 decimal places ±0.1

4100U
8 Zone Module - Conventional Detectors
Wiring Diagram

Tyco Safety Products
17 Mary Muller Drive
P.O. Box 19545
Christchurch. Ph: +64 3 3895098
New Zealand. Fax: +64 3 3895938

Drawing No: 1976-181  Sheet 200 of  N
A3  ISS/REV A  PART No:
WIRE LEGEND:
B= BLACK
R= RED
S= SHIELD

DETECTOR CIRCUIT
SUPERVISED CIRCUIT
NOMINAL VOLTAGE 24 VDC
LINE SUPERVISION CURRENT: 7.5 mA
DETECTOR OLED CURRENT: 2.0 mA
TOTAL SUPERVISION CURRENT: 9.5 mA
VOLTAGE SUPPLIED: 15.4 TO 32V
MAX ALARM (SHUNT) CIRCUIT CURRENT: 72 mA
MAX LINE RES. OR LINE DISTANCE
(WHICHEVER COMES FIRST): 10 OHMS OR 600m

24 VDC FROM
PREVIOUS DEVICE

MAX LOAD PER
MONITOR
ZONE:
16 mA NORMAL
72 mA ALARM
\* 24V

R B S
+ - OPTIONAL SHIELD

IDNET OR MAPNET
FROM PREVIOUS DEVICE

NOTES:
1. MAPNET II OR IDNET LINES ARE TO BE 0.75 SQmm OR GREATER
   TWISTED SHIELDED PAIR.
2. MAXIMUM TOTAL WIRE LENGTH (INCLUDING ALL BRANCHES) ON
   CIRCUIT NOT TO EXCEED 600m.
3. MAXIMUM QUANTITY OF DEVICES PER MAPNET CIRCUIT: 127.
4. MINIMUM WIRE GAUGE FOR 28 VDC WIRING IS 0.75 SQmm.
5. IF A ZONE IS WIRED FOR ALARM VERIFICATION, WIRE ONLY SMOKE OR
   HEAT DETECTORS TO THAT ZONE. DO NOT USE ANY OTHER TYPE OF
   DEVICES ON THE SAME ZONE.
6. IF A ZONE IS NOT USED, CONNECT A 3.3K 1/2W RESISTOR ACROSS
   ZONE TERMINALS 7 AND 8.

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1 DECIMAL PLACE ±0.5, 2 DECIMAL PLACES ±0.3, 3 DECIMAL PLACES ±0.1

ISS/REV AMENDMENTS ECO DRN CHKD AUTH APVD DATE
A ORIGINAL - KJS

4100U
ZONE ADDRESSABLE MODULE (4090-9101)
WIRING DIAGRAM

TYCO SAFETY PRODUCTS
17 MARY MULLER DRIVE
CHRISTCHURCH. PH: +64 3 3895096
P.O. BOX 19545
NEW ZEALAND. FAX: +64 3 3895938

DRAWING No: 1976-181 SHEET 202 Of N
A3 ISS/REV A PART No:
NOTES:

1. FIT A FERRITE TO EACH PAIR OF WIRES LEAVING THE 4100U CABINET.
2. MAXIMUM NUMBER OF THE DEVICES BETWEEN PAIRS OF ISOLATORS IS 40. FOR LOOP WIRING, AN ISOLATOR MUST BE INSTALLED AT THE START AND END OF THE LOOP.
3. MAXIMUM NUMBER OF DEVICES ON A WIRING SPUR IS 40.
4. THIS WIRING APPLIES TO IDNET CARDS AND TO THE IDNET PORT ON THE SYSTEM POWER SUPPLY.
5. CABLE MUST BE 0.75 SQmm OR HEAVIER.
6. LOOP ISOLATORS CAN BE ISOLATOR BASES OR ISOLATOR MODULES. SEE SHEET 102 OR 500 FOR ISOLATOR WIRING.

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WIRE LEGEND:
B = BLACK
R = RED
S = SHEILD

MAX LOAD PER ZAM
15 mA NORMAL
72 mA ALARM
9 24V

24 VDC FROM PREVIOUS DEVICE

NOTES:
1. MAXIMUM WIRE LENGTH ON CIRCUIT NOT TO EXCEED 600m, OR 10 OHMS RESISTANCE.
2. IDNET OR MAPNET LINES AR TO BE 0.75 SQmm OR GREATER TWISTED SHEILED PAIR.
3. MAXIMUM QUANTITY OF DEVICES PER MAPNET CIRCUIT: 127.
4. MINIMUM WIRE GAUGE FOR 24 VDC WIRING IS 0.75 SQmm.
5. 24V SUPPLY AT ZAM 20.0~33.0V DC.
6. IF A ZONE IS NOT USED, CONNECT A 3.3K 1/2W RESISTOR ACROSS ZONE TERMINALS 7 AND 8.

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1 DECMIAL PLACE ±0.5, 2 DECMIAL PLACES ±0.3, 3 DECMIAL PLACES ±0.1

COMPATIBLE "Ex" DECTORS

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<td>MF601Ex</td>
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<td>M601TEx</td>
<td>9</td>
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<td>15</td>
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<td>(T54 ETC)</td>
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<td>(HEAT &amp; CO)</td>
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<td>(CO)</td>
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DETECTOR CIRCUIT

NOMINAL VOLTAGE: 22 VDC
LINE SUPERVISION CURRENT: 7.5 mA
DETECTOR (IDLE CURRENT: 1.0 mA
MAX ALARM (SHORT) CIRCUIT CURRENT: 38 mA
MAX LINE RES. OR LINE DISTANCE (WHICHEVER COMES FIRST): 10 OHMS OR 600m

3.3K 1W RESISTOR

COMPATIBLE EX DECTORS

SEE SHEET 101 FOR BASE WIRING.

205 N1976-181

A3 ISS/REV A PART No:

TYCO SAFETY PRODUCTS
17 MARY MULLER DRIVE
P.O. BOX 19545
CHRISTCHURCH, PH: +64 3 3895096
NEW ZEALAND. FAX:+64 3 3895939

DRAWING No: 1976-181 SHEET 205 of N
INPUT CIRCUIT LENGTHS ARE NOT TO EXCEED 150m

TYPICAL COMBINATION CIRCUIT: NOTE: NO (2) SWITCH OPERATION HINDS NO (1) SWITCH OPERATION

TYPICAL CIRCUIT WITH MULTIPLE NO CONTACTS

FROM PREVIOUS DEVICE OR PANEL

TO NEXT DEVICE (IF USED) OR PANEL

WIRING TO RELAY CONTACTS IS UNSUPERVISED. RELAY FUNCTION IS PROGRAMMABLE. CONTACT RATING IS 30V DC 2A RESISTIVE, 1A INDUCTIVE.

NOTES:
1. 4090-9120 CANNOT BE USED WITH MAPNET.
MULTIPLE NO CONTACTS CAN BE CONNECTED

INPUT CIRCUIT LENGTHS ARE NOT TO EXCEED 150m

FROM PREVIOUS DEVICE OR PANEL

MAPNet+ — R
MAPNet− — B

OPTIONAL SHIELD

TO NEXT DEVICE (IF USED)

MAPNet+ — R
MAPNet− — B

WIRING TO RELAY CONTACTS IS UNSUPERVISED. RELAY CONTACTS RATED FOR 2A (1A FOR INDUCTIVE LOAD), 30 VDC. RELAY FUNCTION MUST BE PROGRAMMED.

2190–9173 RELAY MODULE

N.C.
COMMON
N.O.
NOT USED

NOTES:
1. DO NOT MOUNT DEVICE WHERE IT WILL EXPERIENCE SHOCKS GREATER THAN 60G, VIBRATION GREATER THAN 2.5mm (10 TO 55 Hz DOUBLE AMPLITUDE), OR MAGNETIC FIELD GREATER THAN 7000A/m.
2. 2190–9173 CANNOT BE USED WITH IDNet.
WIRING TO RELAY CONTACTS IS UNSUPERVISED.
RELAY CONTACTS RATED AT 2A, 30 VDC.
(1A FOR INDUCTIVE LOAD).
THE OPERATION OF THE RELAY IS PROGRAMMABLE.

NOTES:

1. IF SHIELD IS PRESENT, IT SHOULD BE CONNECTED TO THE OUTGOING IDNet SHIELD TO PROVIDE A CONTINUOUS SHIELD OVER THE LENGTH OF THE IDNet CIRCUIT. DO NOT CONNECT THE SHIELD TO ANY METALWORK AT THE ZAM.
2. 4090–9002 CANNOT BE USED WITH MAPNet.

IDNet FROM PREVIOUS DEVICE OR PANEL

OPTIONAL SHIELD

IDNet TO NEXT DEVICE OR PANEL

NOT USED

NOT USED


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1 DECIMAL PLACE ±0.5, 2 DECIMAL PLACES ±0.3, 3 DECIMAL PLACES ±0.1
NOTES:
1. RELAY CONTACTS RATED 3A AT 30V DC. THE C CONTACT IS PROTECTED BY 3A FUSE.
2. RELAY OPERATION MUST BE PROGRAMMED.
3. WIRING TO RELAY CONTACTS IS UNSUPERVISED.
4. FB+ INPUTS MONITOR NO OR NC STATUS CONTACTS FROM CONTROLLED DEVICES WITHOUT SUPERVISION.
   STATUS CONTACT CIRCUIT MUST RETURN TO PANEL 0V AS IN THE EXAMPLES. FB1 EXAMPLE USES THE LOAD 0V WIRING TO RETURN.

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3rd ANGLE PROJECTION

4100U
8 POINT AUXILIARY RELAY CARD (4100-3003)
WIRING DIAGRAM

TYCO SAFETY PRODUCTS
17 MARY MULLER DRIVE
P.O. BOX 19545
CHRISTCHURCH, PH: +64 3 3895096
NEW ZEALAND. FAX: +64 3 3895938

DRAWING No: 1976-181 SHEET 405 of N
A3 ISS/REV A PART No:
NOTES:
1. ALL WIRING MUST BE 1.5 SQ.mm SHIELDED PAIR OR TO LOCAL CODE.
2. CONDUCTORS MUST BE FREE OF ALL GROUNDS.
3. ALL WIRING IS SUPERVISIED UNLESS OTHERWISE NOTED. SUPERVISORY POWER: 2.4 mA @ 24V DC.
4. ALL SIGNAL PORTS HAVE IDENTICAL CHARACTERISTICS: CAPACITY IS AT 30V DC.
5. IF A CIRCUIT IS NOT USED, CONNECT 10K, 1/2W EDLR FROM SIG+ TO SIG- TERMINALS.
6. BLOCKING DIODE – (IN5404, 3A) – REQUIRED WHEN SWITCHING NON-POLARIZED LOADS.
7. OUTPUT OPERATION MUST BE PROGRAMMED. THERE IS NO DEFAULT BEHAVIOUR.
8. DISTRIBUTION LOOMS AND CONNECTORS:
   - P2 CONNECTS TO THE FIRST TWO POINTS (SIGNAL 3 AND 4)
   - P3 CONNECTS TO THE NEXT TWO POINTS (SIGNAL 5 AND 6)
   - P4 CONNECTS TO THE FIRST TWO POINTS (SIGNAL 7 AND 8)
   - PINS 1 AND 4 CONNECT TO +24V
   - PINS 2 AND 5 CONNECT TO 0V
   - PINS 3 AND 6 ARE TO LOOP SHIELD THROUGH (IF USED).
   - JUMPERS P5 TO P10 ON SIGNAL CARD ARE IN "S" POSITION.
LEAVE 10K EOLR ON B TERMINALS OF UNUSED NAC

BLACK

FERRITE BEADS ON EACH OUTPUT

SINGLE UNPOLARIZED LOAD

NOTES:
1. EACH NAC CAN DRIVE UP TO 3A ALARM LOAD.
2. 1N5404 DIODES ARE SUITABLE FOR LOADS UP TO 3A.
NOTES:
1. FIT FERRITE BEAD TO EACH NAC CIRCUIT.
2. LEAVE 10K BETWEEN B+ AND B- OF UNUSED NAC OUTPUTS.
3. NAC WIRING TO MINI-GENS SHOULD BE 1.00 SQ mm OR HEAVIER.
4. ALLOW 1W LOSS OF POWER FROM EACH MINI-GEN IN THE EOL RESISTOR.
5. THIS WIRING IS APPLICABLE TO ALL VERSIONS OF MINI-GEN.

1 MINI-GEN ON OUTPUT

2 MINI-GENS ON 1 OUTPUT

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NOTES:
1. FIT FERRITE BEAD TO EACH NAC CIRCUIT.
2. LEAVE 10K BETWEEN B+ AND B− OF UNUSED NAC OUTPUTS.
3. NAC WIRING TO STROBE-DRIVERS SHOULD BE 1.00 SQ mm OR HEAVIER.
4. EACH STROBE DRIVER IS RATED AT 2A MAXIMUM. EACH NAC OUTPUT IS RATED AT 3A MAXIMUM.
5. MULTICANDELA STROBES AND LED BEACONS CANNOT BE MIXED ON THE SAME CIRCUIT.

1 STROBE DRIVER ON OUTPUT

2 STROBE DRIVERS ON 1 OUTPUT

SPS MODULE IN 4100U CABINET
AIR HANDLING SYSTEM

FAN START RELAY (24V DC)

MAPNET RELAY IAM 2190–9173

NOTES:

1. RELAY WIRING IS NOT SUPERVISED.
2. RELAY IAM CONTACTS RATED AT 1A INDUCTIVE AT 30V.
3. RELAY CONTROL AND STATUS DISPLAY MUST BE PROGRAMMED AT THE FIRE PANEL.
4. 6K8 EOL RESISTOR ONLY FITTED FOR 4090–9118.

+24V RED

0V BLACK

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3rd ANGLE PROJECTION

4100U
EXAMPLES - FAN CONTROLS WITH RELAY IAMS WIRING DIAGRAM

TYCO SAFETY PRODUCTS
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P.O. BOX 19545
CHRISTCHURCH. PH: +64 3 3895098
NEW ZEALAND. FAX: +64 3 3895938

DRAWING No: 1976-181 SHEET 412 of N

ISS/REV A3  ISS/REV B  PART No:
NOTES:

1. POWER ISOLATORS ARE SYMMETRICAL. CURRENT CAN FLOW A TO B OR B TO A.
2. POWER ISOLATORS ARE RATED FOR UP TO 2A AT 32VDC. NOT SUITABLE FOR AC OR HIGHER VOLTAGE.
3. EACH ISOLATOR ADDS 0.08Ω TO THE CABLE RESISTANCE.
4. FOR BEST PROTECTION FROM OVERLOADS, RETURN THE FAR END OF THE POWER CABBING TO THE 24V SUPPLY FROM THE PANEL (LOOP WIRING OR CLASS A).
5. EACH ISOLATOR CAN BE CONTROLLED TO SWITCH ON AND OFF, AS WELL AS AUTOMATICALLY ON OVERLOAD.
6. 4090-9117 CANNOT BE USED WITH MAPNET.

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1 DECIMAL PLACE ±0.5, 2 DECIMAL PLACES ±0.3, 3 DECIMAL PLACES ±0.1.
NOTES:

1. FIT FERRITE BEAD TO EACH PAIR OF WIRES LEAVING THE CABINET.
2. LOOP MODE (CLASS A) PROVIDES BEST SECURITY SINCE A FAULT IN ONE SECTION WILL NOT PREVENT COMMUNICATION. IF LOOP MODE IS NOT USED, LINK B+ TO A+ AND B- TO A- ON CPU MOTHERBOARD.
3. IF WIRES LEAVE THE BUILDING, FIT 2081-9044 OVERVOLTAGE PROTECTOR AT EXIT AND ENTRY POINTS.

4. THE CONSTRAINTS ON RUI CIRCUIT CABLING ARE:
   A. CABLE USED MUST BE 0.75 SQmm OR HEAVIER (AS 1670.1 REQUIREMENT).
   B. THE TOTAL CABLE CAPACITANCE AND RESISTANCE MUST BE NO MORE THAN 0.58μF AND 36Ω RESPECTIVELY. IF VOLTAGE TRANSIENT SUPPRESSORS ARE USED, THE ADDED CAPACITANCE AND RESISTANCE FROM THESE DEVICES MUST BE CONSIDERED.
   C. FOR CLASS B/SPUR WIRING,
      i. THE CABLE DISTANCE FROM THE MASTER 4100U TO ANY SLAVE RTU IS NO MORE THAN 760M, AND THE COLLECTIVE DISTANCE OF ALL SPURS ON THE RUI CIRCUIT IS NO MORE THAN 3000M.
      ii. THE TOTAL NUMBER OF DETECTION DEVICES SERVED BY THE RUI WIRING IS LIMITED TO 40 (AS 1670.1 REQUIREMENT).
   D. FOR CLASS A/LOOP WIRING,
      i. THE TOTAL CABLE DISTANCE AROUND THE LOOP IS NO MORE THAN 760M.
      ii. THERE IS NO SPECIFIC LIMIT FOR DETECTION DEVICES CONNECTED TO RTUS FORMING PART OF THE LOOP.
      iii. RTUS SERVED BY A SPUR FROM THE LOOP ARE LIMITED TO 40 DETECTION DEVICES (AS 1670.1 REQUIREMENT).
   E. RUI CABLING MUST NOT BE RUN CLOSER THAN 50MM TO 240V MAINS CABLING, OR CLOSER THAN 150MM TO HIGHER MAINS VOLTAGES (AS 5009 REQUIREMENT).
   F. IF RUI CABLING AND MAPPED/INET CABLING ARE RUN IN CLOSE PARALLEL, E.G. IN CONDUIT, EITHER THE RUI OR THE MAPPED/INET CABLING MUST BE SCREENED.

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ISS/REV | AMENDMENTS | ECO | DRN | CHKID | AUTH | APVD | DATE |
--------|-------------|-----|-----|-------|------|------|------|
A       | ORIGINAL    |     |     |       |      |      | 24-8-08|
B       | ADDED RUI CABLE REQUIREMENTS (FROM PS80027). | 4070 | KJS | LSC | RC | DP | 15-10-09|

4100U
TRANS PonDER INTERFACE (4100-0620)
WIRING DIAGRAM

TYCO SAFETY PRODUCTS
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NEW ZEALAND
FAX:+64 3 3895938

DRAWING No: 1976-181 SHEET 600 of N
A3 ISS/REV B PART No:
NOTES:
1. FIT FERRITE BEAD TO EACH PAIR OF WIRES LEAVING THE CABINET.
2. ONLY CONNECT SHIELDS TO GROUND AT "RIGHT" PORTS.
3. THE "RIGHT" PORT OF ONE PANEL IS ALWAYS CONNECTED TO THE "LEFT" PORT OF THE NEXT PANEL. THE LAST PANEL MUST BE CONNECTED BACK TO THE FIRST PANEL TO FORM A CLOSED LOOP.
4. WIRE TO BE 0.75 SQ.mm SHIELDED TWISTED PAIR (3000m MAX) OR 0.2 SQ.mm SHIELDED OR UNSHIELDED TWISTED PAIR (2000m MAX).
5. IF WIRES LEAVE THE BUILDING, FIT 2081-9044 OVERVOLTAGE PROTECTORS AT EXIT AND ENTRY POINTS.
NOTES:

1. FIT FERRITE BEAD TO EACH PAIR OF WIRES LEAVING THE CABINET.
2. LOOP MODE (CLASS A) PROVIDES BEST SECURITY SINCE A FAULT IN ONE SECTION WILL NOT PREVENT COMMUNICATION. IF LOOP MODE IS NOT USED, LINK RUI B+ TO A+ AND B− TO A− ON CPU MOTHERBOARD.
3. WIRE TO BE 1.5 SQ.mm TWISTED SHIELDED PAIR. MAXIMUM LOOP LENGTH IS 1200 METRES.
4. IF WIRES LEAVE THE BUILDING, FIT 2081-9044 OVERVOLTAGE PROTECTOR AT EXIT AND ENTRY POINTS.
5. POWER WIRING TO BE 0.75 SQ.mm OR HEAVIER. MAXIMUM VOLTAGE DROP TO ANY ANNUNCIATOR IS 2V. EACH ANNUNCIATOR drawing 160mA.
6. RUI DEVICES INCLUDING LCD ANNUNCIATOR CAN BE CONNECTED IN ANY ORDER.
NOTES:

1. AUXILIARY POWER OUTPUT FROM SPS IS PROTECTED BY A PTC WITH 2A RATING.
2. ALL FUSES ON THIS BOARD ARE 1A 20 X 5mm TYPE, DO NOT REPLACE WITH HIGHER RATINGS. EACH FUSE FEEDS TWO SETS OF TERMINALS.
3. NAC OUTPUTS CAN BE INDIVIDUALLY PROGRAMMED AS AUXILIARY POWER OUTPUTS. EACH NAC OUTPUT IS RATED AT 2A MAXIMUM. NAC B- TERMINAL MUST NOT BE LINKED TO DV SINCE THIS WILL BYPASS CURRENT LIMITING CIRCUITRY IN THE SPS.
4. DO NOT CONNECT LOADS DIRECTLY TO THE STANDBY BATTERIES. THIS WILL CONFUSE 4100U SYSTEM MANAGEMENT OF BATTERY CHARGING AND MAY LEAD TO BATTERY DISCHARGE IN SOME SITUATIONS.
NOTES:

1. PSU IS MOUNTED ON 4 X 202-090 SUPPORT POSTS SUPPLIED WITH THE KIT.

2. THE +VB OUTPUT FROM THE PSU IS BATTERY BACKED. THE +VB OUTPUT MUST ONLY BE USED FOR EQUIPMENT NOT REQUIRING BATTERY BACK UP. REFER TO LT0232 FOR PSU CONFIGURATION DETAILS.

3. THE PSU FLT- OUTPUT MUST BE MONITORED BY THE FIRE PANEL, USING A FEEDBACK INPUT OR SIMILAR, IF AN IAM IS USED, AN ISOLATING RELAY, SUCH AS PA0730, MUST BE WIRE BETWEEN THE PSU FLT- OUT AND IAM INPUT. THE RELAY OPERATES ON A FAULT.
NOTES:
1. FIT FERRITE BEAD TO EACH PAIR OF WIRES LEAVING THE FIP CABLE.
2. THE CLOCKWISE AND ANTI CLOCKWISE POWER FEED CIRCUITS MUST BE PHYSICALLY SEPARATED FOR REDUNDANCY, UNLESS RUN UNDERGROUND, OR PROTECTED TO LEVEL WSX3 (AS/NZS 3013). (AS1670.1 REQUIREMENT).
3. EACH RTU HAS A COMBINING CIRCUIT AND SUPERVISION FOR THE DUAL DC FEED. SUPPLY FAULTS ARE MONITORED BY THE TRANSPONDER INTERFACE CARD (TIC).
4. THE DC FEEDS FROM THE FIP MUST BE SEPARATELY FUSED OR PROTECTED AGAINST OVERLOAD.
5. MINIMUM CABLE SIZE MUST BE DETERMINED BASED ON TOTAL RTU LOAD. REFER TO SHEET 600 FOR REQUIREMENTS ON THE RTU COMMUNICATIONS WIRING.
6. SUGGESTED WIRING AT THE TAP-OFF TO EACH RTU IS SHOWN HERE.
NOTES:

1. FIT FERRITE BEAD TO EACH PAIR OF WIRES LEAVING THE FIP AND PSU CABINET.

2. THE UP AND DOWN POWER FEED CIRCUITS MUST BE PHYSICALLY SEPARATED FOR REDUNDANCY, UNLESS RUN UNDERGROUND, OR PROTECTED TO LEVEL W5X3 (AS/NZS 3013). (AS1670.1 REQUIREMENT).

3. EACH RTU HAS A COMBINING CIRCUIT AND SUPERVISION FOR THE DUAL DC FEED. SUPPLY FAULTS ARE MONITORED BY THE TRANSPONDER INTERFACE CARD (TIC).

4. THE TOP POWER MAY BE FROM A MAINS POWERED RTU OR STANDALONE POWER SUPPLY. A STANDALONE SUPPLY MUST BE MONITORED FOR FAULTS.

5. NECESSARY WIRING MINIMUM CABLE SIZE MUST BE DETERMINED BASED ON TOTAL RTU LOAD. REFER TO SHEET 600 FOR REQUIREMENTS ON THE RTU COMMUNICATIONS Wiring.

6. SUGGESTED WIRING AT THE TAP-OFF TO EACH RTU IS SHOWN HERE.