VIGILANT

Grade 3 User Interface Installation Instructions (FP1121 & FP1122)

Installation Instructions

1. Checking the Kit

The Grade 3 User Interface Doors are designed for use with the T-Gen2 Emergency Warning System used in VIGILANT *MX1* and Simplex fire alarm panels in 19" rack cabinets.

These instructions cover the fitting and connection of the Grade 3 User Interface Door in an *MX1* and Simplex fire alarm panel. The details of any necessary changes to the *MX1 and Simplex* system configurations or other hardware are not covered here.

Before installing a Grade 3 User Interface Door, check that all items in the kit are present and undamaged.

Grade 3 User Interface Door Complete With T-Gen 60 (FP1121)

The FP1121 3U User Interface Door includes a T-Gen 60 mounted on the rear of the door, a Microphone, all the required hardware to mount the door in an *MX1* cabinet, and cabling to wire the door to the *MX1* Controller Board and a slave T-Gen 60, 100V Switching or 100V Splitter Module.

Qty	Description
1	Grade 3 User Interface Door with T-Gen 60 and Mic
1	KT0575 SET OF EOL RESISTORS AND 100V WARNING LABEL, SLEEVING
1	LM0401 T-GEN2 TO *MX1* LOOM (for wiring to ANC1 on the *MX1* Controller)
1	LM0608 EARTH LOOM 1.0m (for earthing door to fire panel cabinet)
1	734-075 Q-BUS LOOM 2.4m (for wiring to a 100V Switching Module)
1	LM0583 RJ45 LOOM 1.5m (for wiring to a Slave T-Gen 60)
1	WR0067 0.75SQmm TWIN 2.0m (for 100V wiring)
1	LB0684 BLANK ZONE LABEL SET (for labelling zone controls)
1	LT0667 T-GEN2 INSTALLATION & OPERATING INSTRUCTIONS
1	LT0672 INSTALLATION INSTRUCTIONS (these instructions)
1	LT0673 T-GEN2 GRADE 3 USER INTERFACE OPERATING INSTRUCTIONS
1	KT0538 containing 4 x M6 cage nuts, screws and washers and 2 plastic washers for mounting door

Grade 3 Grey User Interface Door (FP1122)

The FP1122 3U Grey User Interface Door includes a Microphone, all the required hardware to mount the door in an *MX1* cabinet, and cabling to wire the door to a T-Gen 60 or T-Gen 120 mounted in the cabinet.

Qty	Description
1	Grade 3 Grey User Interface Door with Mic
1	LM0608 EARTH LOOM 1.0m (for earthing door to fire panel cabinet)
1	734-075 Q-BUS LOOM 2.4m (for wiring to the T-Gen 60/120, or a 100V Switching Module if fitted)
1	LB0684 BLANK ZONE LABEL SET (for labelling zone controls)
1	LT0672 INSTALLATION INSTRUCTIONS (these instructions)
1	LT0673 T-GEN2 GRADE 3 USER INTERFACE OPERATING INSTRUCTIONS
1	KT0538 containing 4 x M6 cage nuts, screws and washers and 2 plastic washers for mounting door

Grade 3 Black User Interface Door (FP1123)

The FP1123 3U Black User Interface Door includes a Microphone, all the required hardware to mount the door in a Simplex cabinet, and cabling to wire the door to a T-Gen 60 or T-Gen 120 mounted in the cabinet.

Qty	Description
1	Grade 3 Black User Interface Door with Mic
1	KT0575 SET OF EOL RESISTORS AND 100V WARNING LABEL
1	LM0608 EARTH LOOM 1.0m (for earthing door to fire panel cabinet)
1	734-075 Q-BUS LOOM 2.4m (for wiring to the T-Gen 60/120, or a 100V Switching Module if fitted)
1	LB0684 BLANK ZONE LABEL SET (for labelling zone controls)
1	LT0672 INSTALLATION INSTRUCTIONS (these instructions)
1	LT0673 T-GEN2 GRADE 3 USER INTERFACE OPERATING INSTRUCTIONS
1	KT0538 containing 4 x M6 cage nuts, screws and washers and 2 plastic washers for mounting door

2. General Description

The Grade 3 User Interface Doors mount in an *MX1* or Simplex Panel and occupy 3U of 19” rack height.

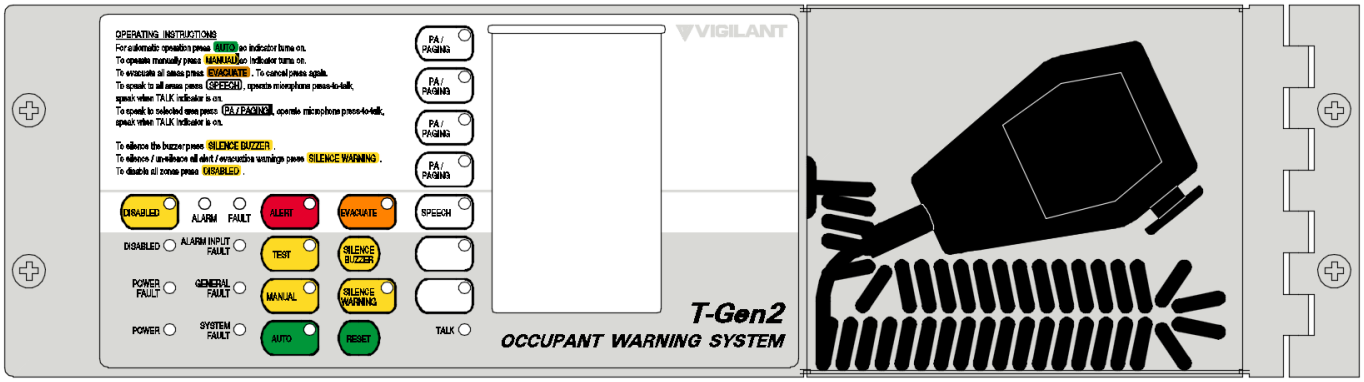

Figure 1 – Grade 3 User Interface Door, FP1121/2 shown

3. Mounting the Grade 3 User Interface Door

Determine the position of the Grade 3 User Interface Door to be placed in the cabinet.

Locate the four positions for the placement of the screws and insert the four cage nuts to suit.

Fit the door using one of the M6 screws (including metal washer) in the top hole of the hinge plate but do not tighten it fully.

Fit another M6 screw (including metal washer) into the bottom hole of the hinge plate and tighten both screws onto the cabinet bracket, aligning the door with the hole positions on the cabinet left-hand side.

Figure 2 – Mounting the Grade 3 User Interface Door

Insert the two remaining M6 screws (including metal washer) to the screw holes on the non-hinged side of the door. Place a plastic self-retaining washer on each of the screws on the inside of the door to keep these screws on the door when it is open.

4. Wiring a Grade 3 User Interface Door

The FP1121 Grade 3 User Interface Door with T-Gen 60 is connected to:

- *MX1* Controller ANCIL / RELAY 1 connector (J4) and LOOP INTERFACE terminals J33 using loom LM0401 fitted to the door. Refer to the T-Gen2 Installation Instructions (LT0667) for wiring details.
- If using in a Simplex 4100ESi panel wire the T-Gen2 to the APS/LPS as per drawing 1976-181 Sheet 432 (included in this manual).
- One of the 100V Switching Modules connector (J1 or J2) using the Q-BUS loom 734-075 fitted to the door, if any 100V Switching Modules are fitted.
- One of the 100V Switching Modules connector (J6) or the 100V Splitter Modules (J6), using the twin 0.75SQmm loom fitted to the door, if these are fitted.

A FP1122/3 Grade 3 User Interface Door is connected to:

- T-Gen 60/120 (J32) using the Q-BUS loom 734-075 fitted to the door. If 100V Switching Modules are also connected to the T-Gen then the User Interface QBus loom should connect to J2 on the last 100V Switching Module.

For further details on the T-Gen2 wiring refer to the T-Gen 2 Installation Instructions (LT0667), drawing 1982-71 Sheet 134 and 1976-181 Sheet 432 (later in this document).

5. Door Labels

The Paging Areas and User Buttons are labelled using a slide-in label. A blank label is provided with each kit (LB0684). You can also generate labels using a Word template (LB0684).

The label is inserted via the slot in the door front overlay.

6. Status LEDs

The functionality of the LEDs mounted on the front of the User Interface is described in LT0673.
The Grade 3 User Interface Door has 2 internal status LEDs for fault diagnostics:

LED Name	Colour	Description
POWER/ LINK	Green	OFF – no power applied. Flashing every second – operating and communicating with T-Gen2. Steady On – not communicating with T-Gen2, or faulty.
SYSTEM FAULT	Yellow	OFF – no fault present. Flashing – fault present When a System Fault is present the SYSTEM FAULT LED shows a sequence of 8 flashes followed by a pause, with each flash short (250msec) if that fault is not present and long (750msec) if that fault is present. The system faults are indicated in this order: 1. User Interface not communicating with the T-Gen2. Check the T-Gen connection, configuration selected, address setting in T-Gen2 configuration, and Address Rotary switch setting on the User Interface. Will occur when the T-Gen2 is in programming mode (i.e., PC USB connection active). 2. Invalid Address (Not 0…9). Try rotating the address rotary switch and then back to the desired address. If cannot be fixed, replace the User Interface. 3. Firmware CRC Incorrect. Replace the User Interface. 4. Software Fault. Will not occur. 5. Unexpected restart occurred. Something happened to cause the User Interface microprocessor to restart. Clears once status sent to T-Gen2. If does not clear, even after power down/up, replace the User Interface. 6. No Configuration Data. Will occur on startup until the T-Gen2 sends the necessary configuration data to the User Interface. 7. UBus Slave not responding. Will not happen on a Grade 3 User Interface. 8. Hardware mismatch. Replace the User Interface.

7. T-Gen Configuration

The FP1121 Grade 3 door with a T-Gen 60 fitted is factory-configured with a default FP1121 configuration.

A T-Gen2 used with the FP1122/3 Grade 3 door will need configuring to enable the User Interface. This can be done by selecting the default BOWS configuration in the T-Gen2 or programming a specific configuration.

Refer to the T-Gen 2 Installation Instructions (LT0667) and the SmartConfig Programming Manual for instructions on configuring the T-Gen2 for special applications. SmartConfig Lite (SF0323) and its User Manual (LT0345) can be downloaded from the Fireplace: http://vigilant-fire.com.au.

The QBus ONES address rotary switch SW1 on the User Interface is set to 1.

8. Power On and Testing

The T-Gen2 and User Interface will power up when the *MX1* panel is turned on. For the first tests apply mains power only to check the operation without a battery. Once this is confirmed a battery can be connected.

- Check there are no faults present – if there are they will need to be fixed.
- Activate the Alarm Devices on the *MX1* (e.g., do an Alarm Devices Test). This should create an alarm on the T-Gen2 and if the T-Gen2 is in Automatic Mode it will start generating Evacuate tones and messages. Stop the test – this should cause the T-Gen2 to return to normal.
- Press the Microphone PTT switch and check voice announcements can be made to the loud speakers.

9. Supplemental Terms and Licensed Software

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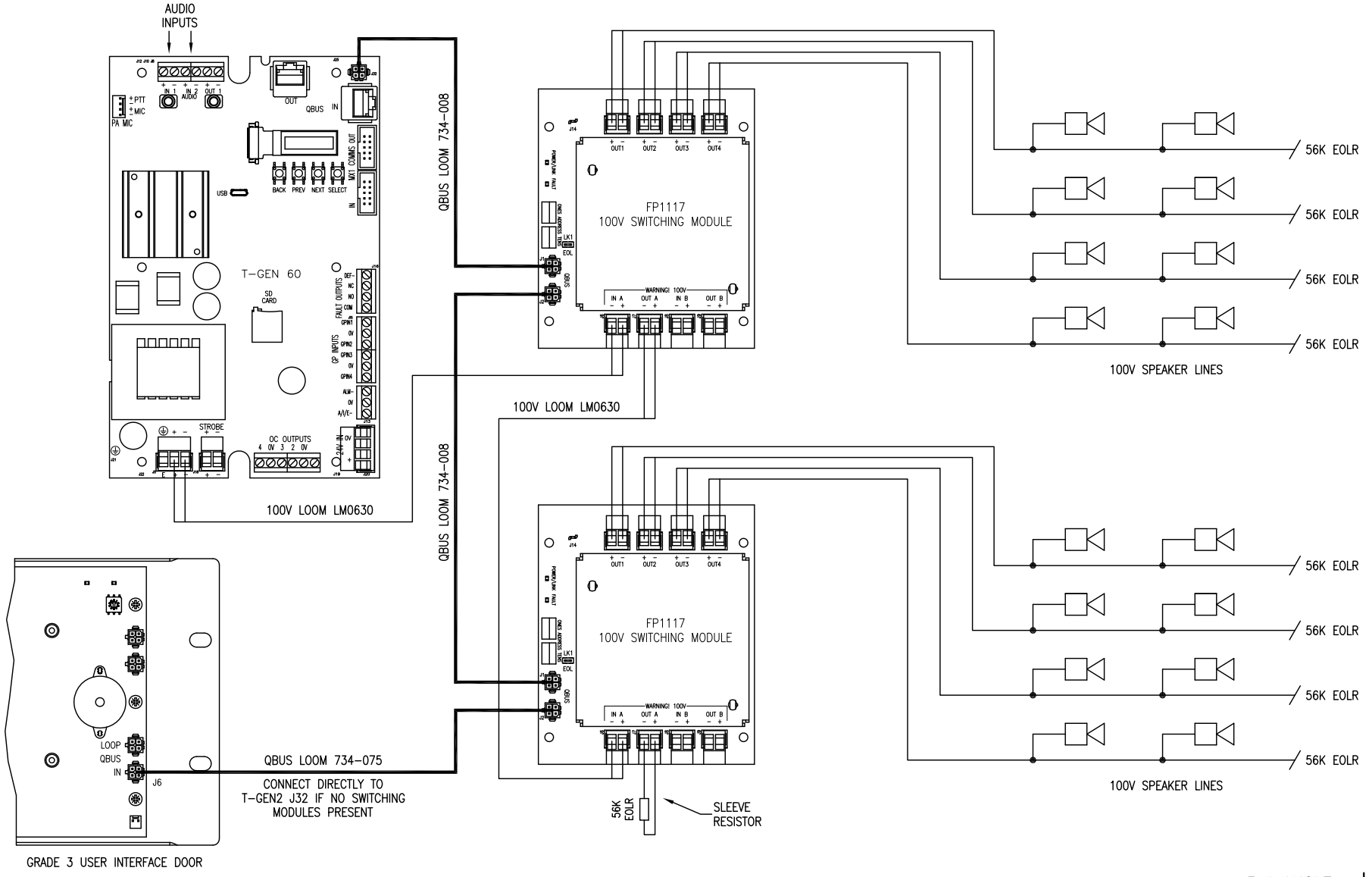

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3rd ANGLE PROJECTION

ISS/REV	AMENDMENTS	ECO	DRN	CHKD	AUTH	APVD	DATE
A	ORIGINAL	5022	KJS	LSC	RC	DC	29-8-17

JOHNSON CONTROLS
17 MARY MULLER DRIVE
P.O. BOX 19545
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NEW ZEALAND. FAX:+64 3 3895938

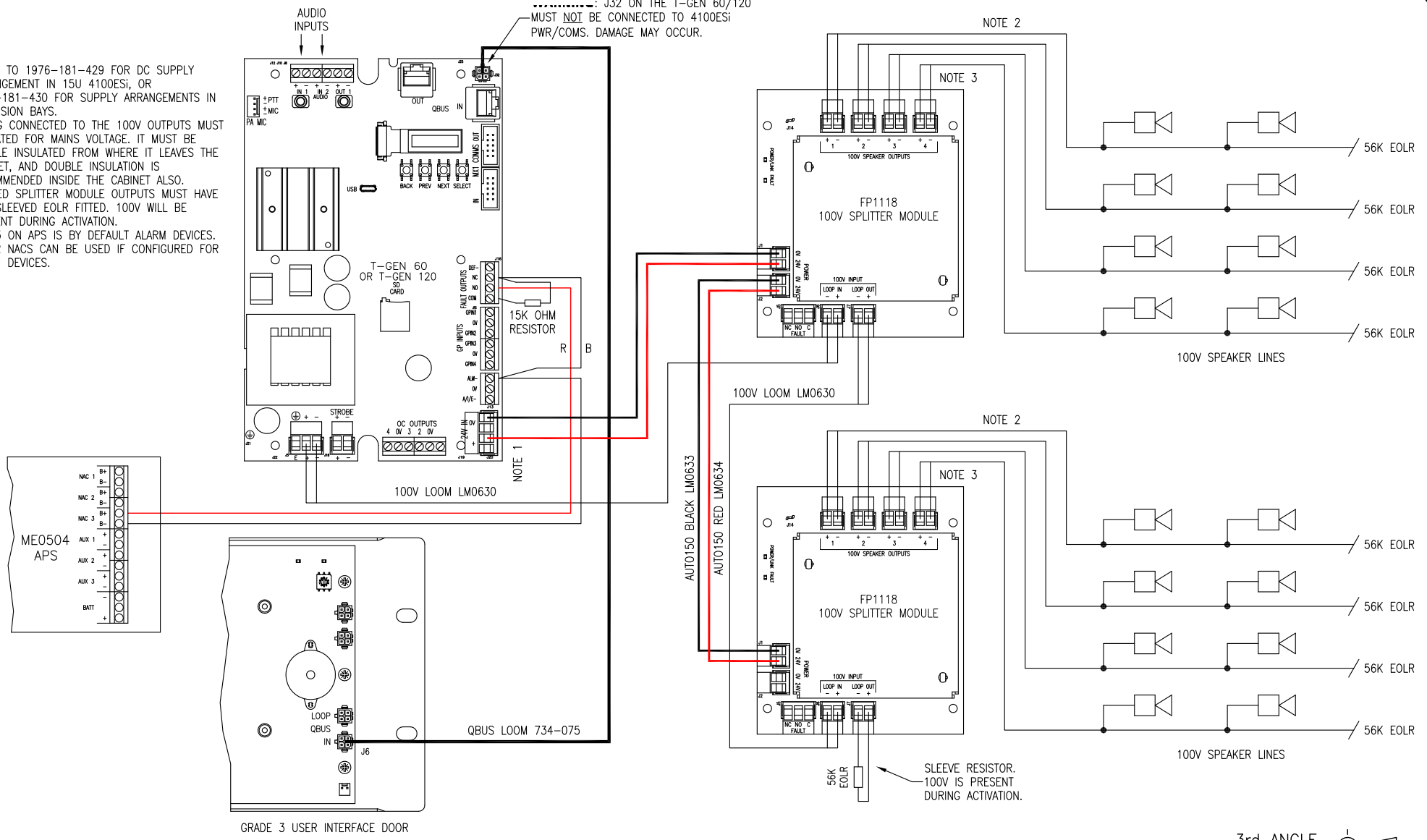
T-GEN2
100V SWITCHING MODULE / UI WIRING DIAGRAM

DRAWING No: 1982-71 SHEET 134 of N

A3 | ISS/REV A | PART No:

NOTES:

1. REFER TO 1976-181-429 FOR DC SUPPLY ARRANGEMENT IN 15U 4100ESi, OR 1976-181-430 FOR SUPPLY ARRANGEMENTS IN EXPANSION BAYS.
2. WIRING CONNECTED TO THE 100V OUTPUTS MUST BE RATED FOR MAINS VOLTAGE. IT MUST BE DOUBLE INSULATED FROM WHERE IT LEAVES THE CABINET, AND DOUBLE INSULATION IS RECOMMENDED INSIDE THE CABINET ALSO.
3. UNUSED SPLITTER MODULE OUTPUTS MUST HAVE 56K SLEEVED EOLR FITTED. 100V WILL BE PRESENT DURING ACTIVATION.
4. NAC 3 ON APS IS BY DEFAULT ALARM DEVICES. OTHER NACS CAN BE USED IF CONFIGURED FOR ALARM DEVICES.



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3rd ANGLE PROJECTION

ISS/REV	AMENDMENTS	ECO	DRN	CHKD	AUTH	APVD	DATE
A	ORIGINAL	5053	KJS	LSC	RC	DC	3-11-17
B	ME0504 CONNECTION UPDATED, NOTE 4 ADDED.	5155	KJS	RC	RC	DC	9-7-18

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4100ESi 100V SPLITTER MODULE WIRING DIAGRAM

DRAWING No: 1976-181 SHEET 432 of N

A3 | ISS/REV B | PART No: