Addendum for QX-5000 Dwelling Silence Feature

The dwelling silence feature allows two amplifiers to be part of the same zone. One amplifier is used for the corridor signaling and one amplifier for the dwelling signaling. When a specific opto-isolated input (Bell 3) is activated during an alarm, the dwelling amplifier will be silenced, while the amplifier for the corridor remains active. Any amplifiers sounding evacuation, paging or manual messages will also remain active.

Compatible Equipment

The dwelling silence feature is available using current QX-5000 components except for the QIF-5000B which must be programmed with firmware SO-154 revision 207 or higher. The specific opto-isolated input (Bell 3) used for the dwelling silence feature is terminal 3 and 4 of J4 on the QIF-5000B board in the audio card cage. If the dwelling silence feature is not used, this input can be used as described in the QX-5000 Manual.
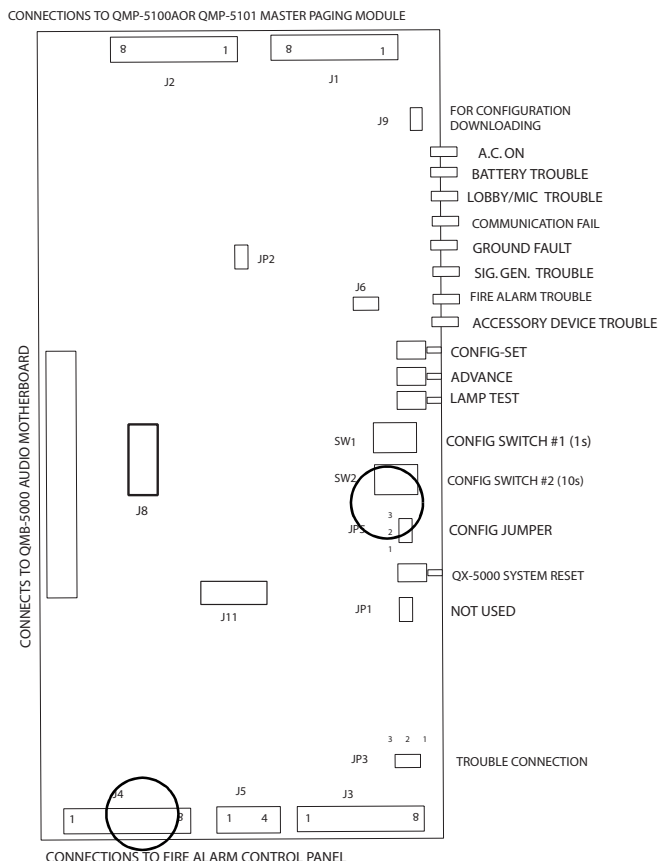
Programming the Dwelling Silence Feature

The dwelling silence feature can only be programmed manually at the QIF-5000B board. On the QIF-5000B board, the feature is by default disabled. To enable it, the following steps must be followed:

1. Place the QIF-5000B in configuration mode by placing the configuration jumper into "PROGRAM" position pins 1 and 2 of JP5. Then press the SYSTEM RESET button (mid-section on the right-hand side of the board, see Figure 1).
2. When the green AC ON LED starts to flash, press the lamp test button repeatedly to cycle through the various functions. Each function is identified by a pattern on the LEDs of the QIF-5000B board. For the dwelling silence function, the top three LEDs (AC ON, Battery Trouble and Lobby Mic Trouble) will be ON steady, all other LEDs will be OFF.
3. The dwelling silence feature is then enabled by setting the rotary switches to 11 and then pressing the CONFIG SET button. The green AC ON LED will flash briefly to confirm dwelling silence function has been programmed. Once the feature is programmed, the configuration jumper should be placed back into the normal position (1and 2 of JP5).

> *i* **Note:** The dwelling silence feature can be disabled by setting the rotary switches to 00.

Figure 1: QIF-5000B Interface Board

JP5: Configuration jumper; normally jumpered between 2-3. Move jumper to pins 1 and 2 for configuration downloading and setting the dwelling silence feature.

J3, J4, J5: Terminals for fire alarm wiring.

Note: J4 terminals **3** and **4** must be connected to the Fire Alarm Control Panel's NAC which, when in alarm, will activate amplifier dwelling silence. For control of dwelling silence feature through an addressable relay control module, see Figure 2.

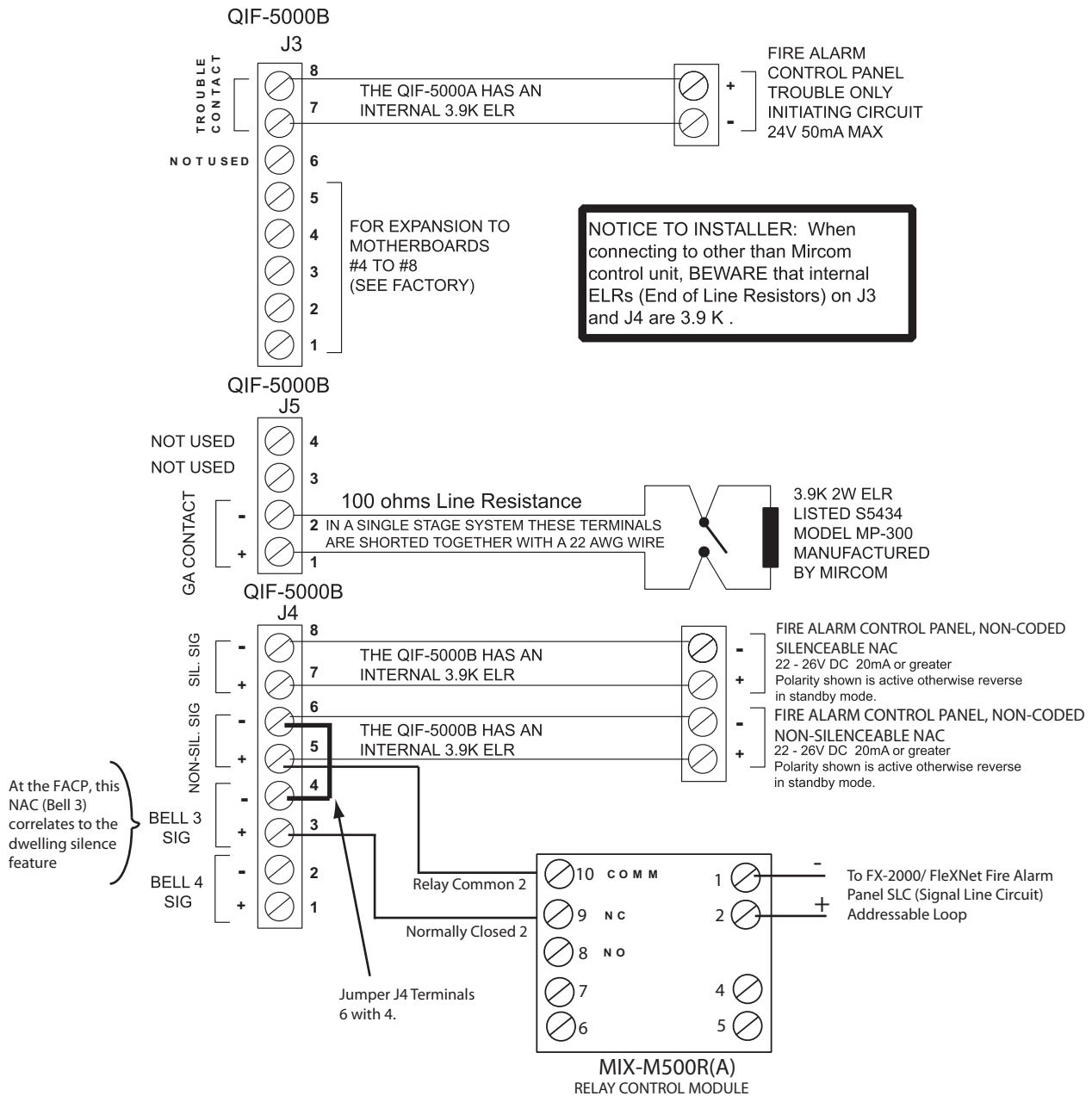> *i* **Note:** The dwelling silence feature is only approved by ULC.

QIF-5000B Interface Board Wiring

The QIF-5000B Interface board wiring to the fire alarm control panel is shown in Figure 2 below.

Note: The Internal 3.9K Ohm ELR's on J3, J4, and J5 may not be compatible with other manufacturers' control units. Consult Mircom when connecting control units other than those manufactured by Mircom.

Figure 2: QIF-5000B Interface Board Wiring

Audio Amplifier Set-up and Wiring

For the dwelling silence feature, two amplifiers (one for dwelling and one for corridor) must be coupled to the same paging zone selector button (QZP series selector panels). Paging zones connected to only one amplifier will not be affected during dwelling silence. The other exception is the QAA-5160 Amplifier which can be grouped in multiples to provide more than 60 Watts of power to areas such garages and large open spaces. When **two or more** QAA-5160 Amplifiers are grouped to one paging zone (for extra power), that zone will not be affected by the dwelling silence operation.

Of the two amplifiers, the choice of the amplifier for the dwellings is done automatically by the QIF-5000B at start-up. The following conditions apply:

1. If two different size amplifiers are used for corridor and dwellings, the amplifier with the higher wattage is assigned for the dwellings. For example, if a 60W QAA-5160 output and a 30W QAA-5230 output are used, the QAA-5160 becomes the amplifier for the dwellings and the QAA-5230 becomes the amplifier for the corridor.

2. If two amplifiers of the same size are used, they should be on the same card. The top circuit (Amp B or D) will be assigned as the dwelling amplifier and the bottom circuit (Amp A or C) as the corridor amplifier. Refer to Figure 3 below.

i **Note:** The audio amplifier set-up can be done using the PC-based QX-5000 audio configurator program.

## Figure 3: Audio Cabinet Displays and Controls

AMP QAA-5160-70/25   AMP QAA-5230-70/25   AMP QAA-5415-70
AMP QAA-5415-25

AMP QAA-5230S-70/25
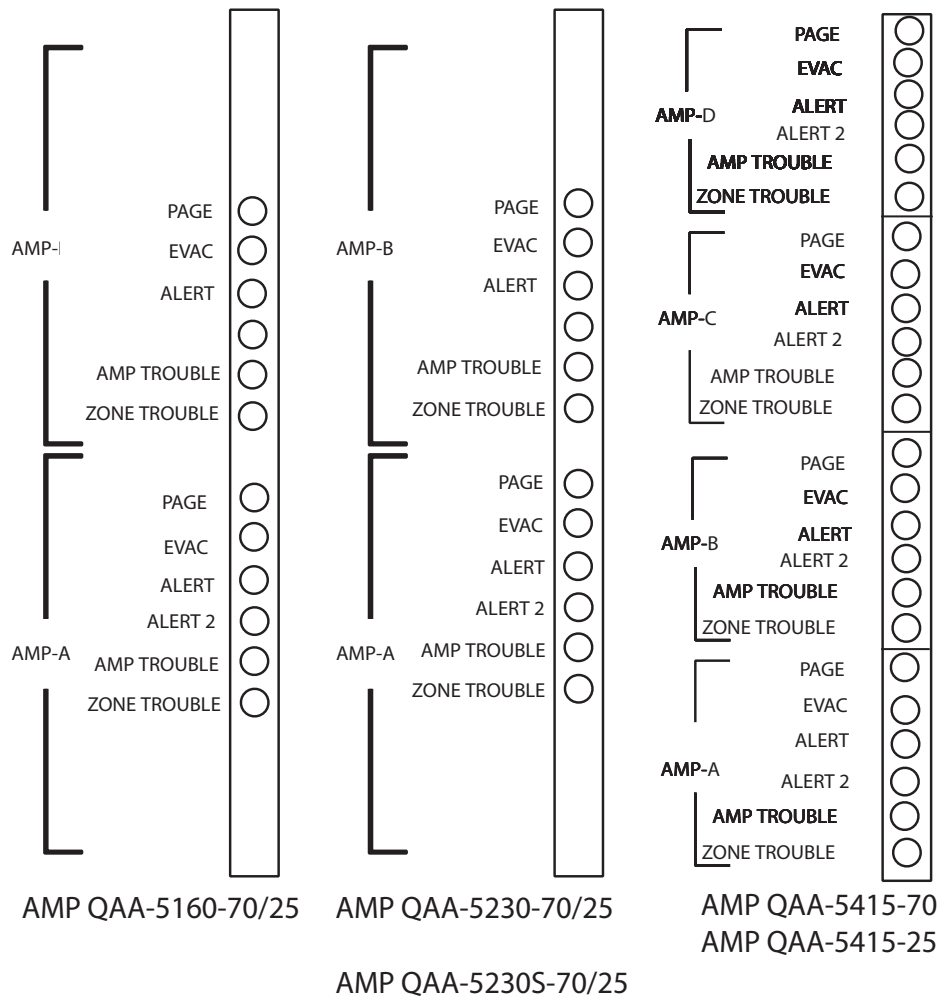
There are five types of amplifiers available:

Amplifier	Description
QAA-5230-70/25	Two 30 watt individually supervised speaker outputs, 70V or 25V
QAA-5230S-70/25	Four 15 watt supervised speaker outputs, 70V or 25V. This amplifier is normally used for split circuit applications. It contains two 30W sections each divided into two 15W speaker zones.
QAA-5415-70	Four 15 watt individually supervised speaker circuits, 70V
QAA-5415-25	Four 15 watt individually supervised speaker circuits, 25V
QAA-5160-70/25	One 60 watt supervised speaker circuit, 70V or 25V

Example using a QAA-5415-70 and QAA-5415-25 Amplifier

QAA-5415-70 quad 15 watt amplifier has four 15 watt amplifiers. Each amplifier has one Class B 15 watt supervised speaker circuit. Each circuit is wired such as to provide one separate speaker zone. The QAA-5415-25 is the same quad amplifier as the QAA-5415 but instead of 70 Volts it is 25 Volts. The zones can be split between corridor and dwellings as shown in Figure 4 below.

Figure 4: QAA-5415-70 or QAA-5415-25 Wiring
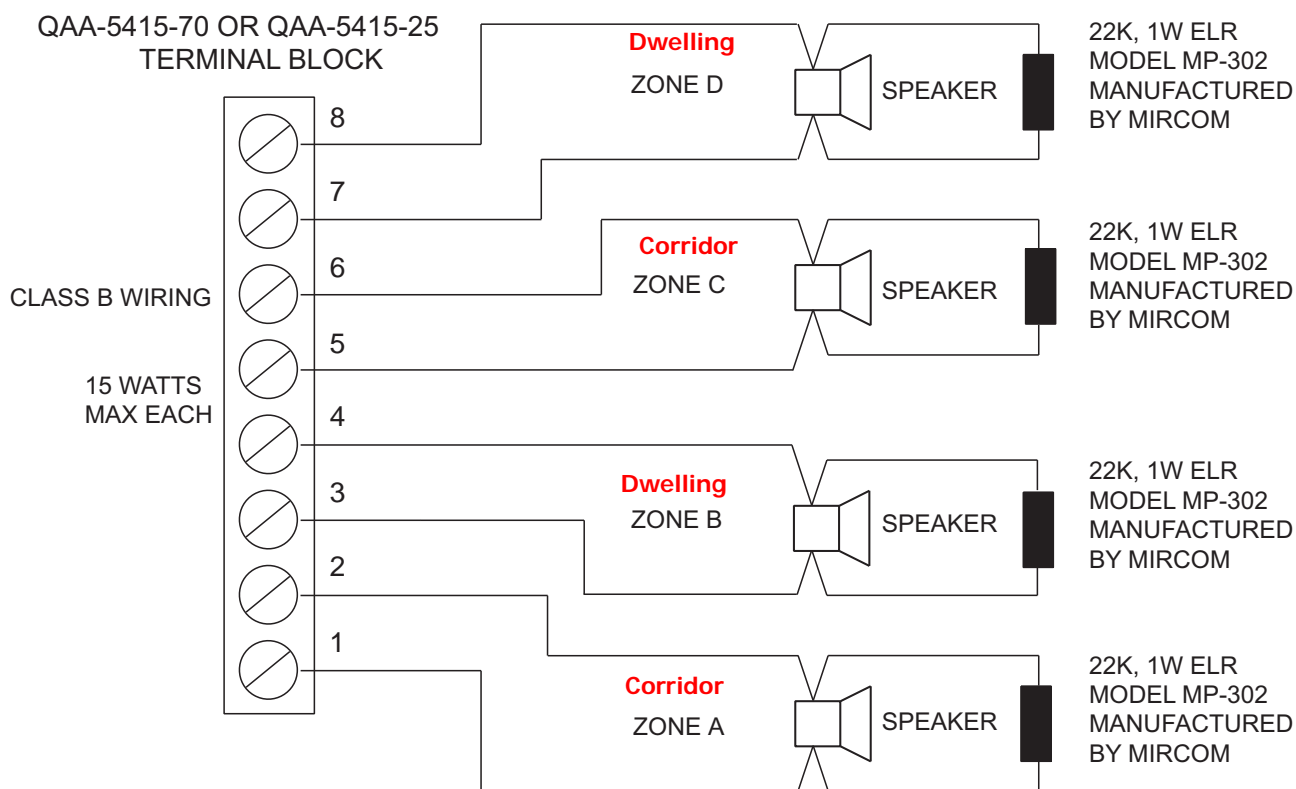
Notes for QAA-5415-70 and QAA-5415-25 Amplifiers:
- All circuits are power limited.
- There are four 3A fast blow fuses on board.

THERE ARE SOME CONFIGURATION DETAILS WHICH NEED TO BE APPLIED AT THE FX-2000/FLEXNET FIRE ALARM PANEL. PLEASE REFER TO THE FIRE ALARM PANEL MANUAL FOR COMPLETE CONFIGURATION DESCRIPTION.