# SIS-204 SPEAKER ISOLATORS



The SIS-204 is a speaker isolator. These isolators remove the speakers which follow it out of the circuit should there be a trouble. This feature provides integrity of the speaker circuit, that is; should an isolated speaker malfunction, the rest of the speakers will continue to function.

**SIS-204 QX-5000 Speaker Isolator** - This model works in conjunction with the QX-5000 and its affiliated "A" version amplifiers. It provides four **non-supervised** isolator outputs or two **supervised** outputs. The supervised output means that should there be a trouble (open circuit) on the speaker circuit, the Isolator Trouble LED will flash. There are two amber Isolator Trouble LEDs, and either one or both will flash for trouble. Any trouble on the speaker circuits will be indicated on the QX-5000 and at the Fire Alarm Panel.

**INSTALLATION:** The speaker isolators mount into a 4" square 2 1/2" deep electrical box. These electrical boxes are usually mounted in hallways, outside the suites which contain the speakers to be isolated. There is a white finish plastic front plate included with the isolator which is mounted onto the isolator using the four screws provided as shown in Figure 1 below.

### **ELECTRICAL RATINGS:**

RATING: For 70V Speaker lines with 60 Watts of speaker

load or less.

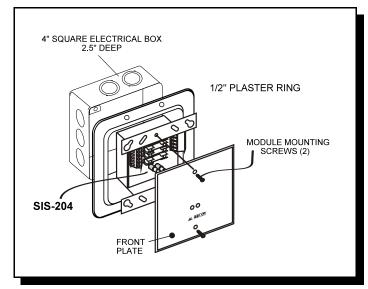
**IN-SUITE SPEAKER LOAD:** 6 Watts Max.

MAXIMUM NUMBER OF ISOLATORS ON A SPEAKEAR

**LINE:** 15 with specified Littelfuse type 312.100 **FUSE:** Littelfuse 100mA, 250V Fast Blow #312.100

**STANDBY CURRENT: 0.0A** 

OPEN CIRCUIT ON (+) OR (-) SIDE:  $200\mu A$  OPEN CIRCUIT ON BOTH SIDES:  $100\mu A$ 



## WIRING:

#### Standard Isolator Supervised Wiring:

The isolator is wired into the amplifier circuit from the QX-

5000 and wired from the isolator to the speakers located in the suites and the circuit is continued to the next isolator or end-of-line resistor. Please refer to wiring diagram. For supervised application, two circuits are available and all the jumpers JP1, JP2, JP3 and JP4 should be removed. For unsupervised application, four circuits are available and all the jumpers JP1, JP2, JP3 and JP4 remain connected.

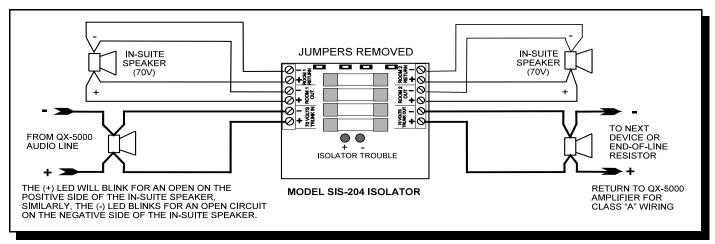


Figure 2: Wiring the SIS-204 Isolator as SUPERVISED

### Speaker Silencing via in Suite Silence Switch SIGSM-100:

The speakers may be silenced by installing a SIGSM-100 Silence Switch within the suite. The isolator is wired in the same manner as mentioned above with the exception that the SIGSM-100 must be wired into the circuit along with the suite speaker.

NOTE: For speaker wiring size and length of run, refer to fire alarm panel installation manual.

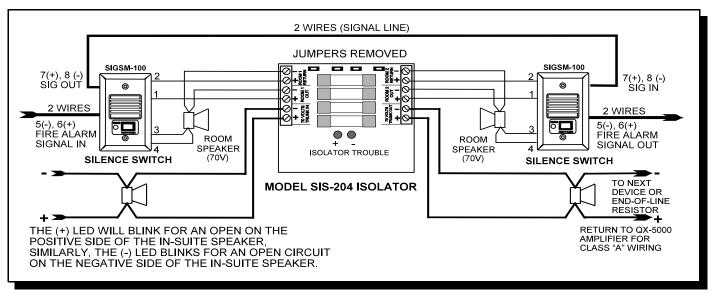


Figure 3: Wiring the SIS-204 Isolator (SUPERVISED) with the SIGSM-100 Silence Switch

#### Standard Unsupervised Isolator Wiring:

The isolator may be wired as unsupervised, which provides four signal circuits. For unsupervised circuits, all the jumpers JP1, JP2, JP3 and JP4 must remain intact. That is, the jumper must connect the pins labelled JP1, another jumper must connect the pins labelled JP2, another jumper must connect the pins labelled JP3 and yet another jumper must connect the pins labelled JP4.

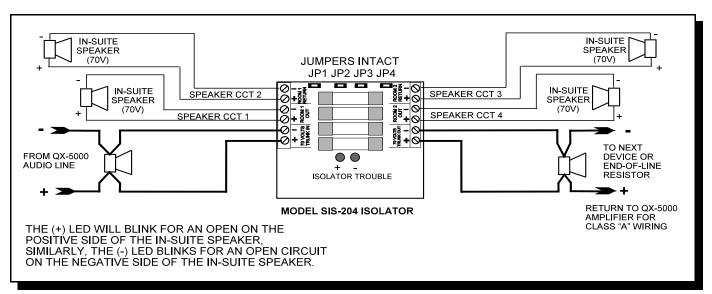


Figure 4: Wiring the SIS-204 Isolator as UNSUPERVISED