

## Features

### Connect additional remote microphones to a Autocall 4100ES fire alarm audio control panel:

- Each A100-1274 Microphone Multiplex Module converts a single microphone input to support up to eight (8) remote microphones
- Up to 40 remote microphones can be connected per audio controller (see compatibility below)
- Allows additional remote microphones for applications such as UFC (Unified Facilities Criteria) requirements for Mass Notification systems for Navy and Air Force requiring a microphone interface within 200 ft (61 m) of travel within a building
- Refer to UFC-4-021-01, 9 April, 2008 for details (Note: Remote microphones and associated controls have specific operation and enclosure requirements per this document)

### Compatibility:

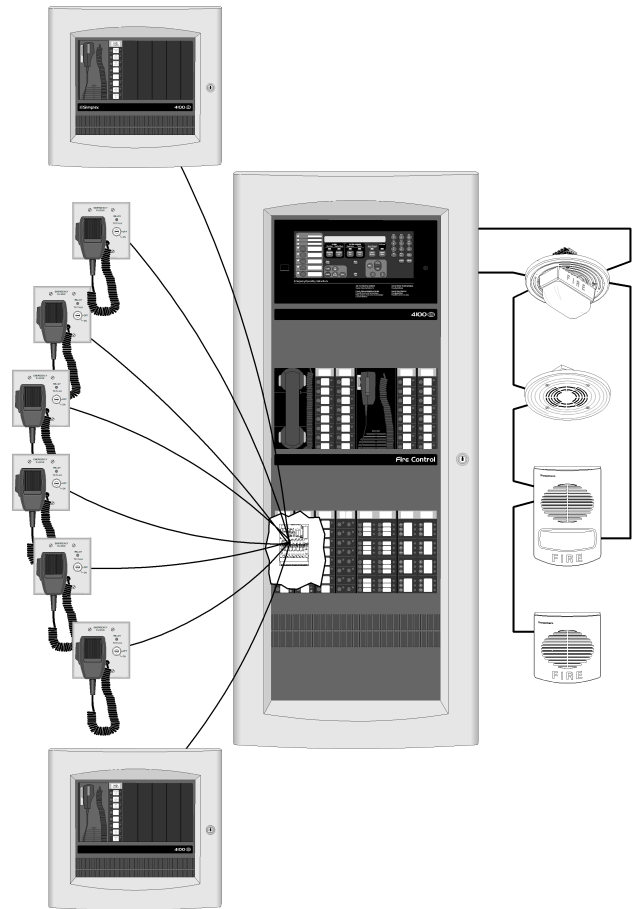
- Connect one (1) A100-1274 to the remote microphone input of either a Digital Audio Controller (Model A100-1311 or an Analog Audio Controller (Model A100-1210)
- Connect up to two (2) A100-1274 Microphone Multiplex Modules to a A100-1240 Auxiliary Audio Input Module (inputs 3 and 4)
- Up to two (2) A100-1240 modules are supported per audio controller

### Compatible microphones:

- Model A100-1244, panel mounted microphone (located in Remote Annunciator)
- Model A4003-9803, remote microphone with control; requires wiring connections to a 24-Point I/O Module (Model A100-1290) in the audio control panel
- Other compatible standard or noise cancelling microphones (each microphone on a A100-1274 Module needs to be the same type)

### Module details:

- Individual remote microphone wiring and PTT (push-to-talk) switch wiring is monitored by the A100-1274 module
- An on-board IDNet Supervised IAM monitors module status (requires one IDNet address and one unit load)
- On-board module diagnostic LEDs indicate Open, Short, + Earth, - Earth per microphone; IAM LED indicates communication status with fire alarm control panel
- On-board earth detection circuit
- UL Listed to Standard 864



**Figure 1: 4100ES Audio System with A100-1274 Microphone Multiplex Module and 8 Remote Microphones; 6, Model A4003-9803 Remote Microphones and 2 (single bay) Remote Annunciators with Remote Microphone**

## Description

### Additional Remote Microphones.

Standard 4100ES Audio systems support up to five (5) remote microphones. For applications requiring more convenient access to remote microphone control, the A100-1274 Microphone Multiplex Module allows up to eight (8) remote microphones to connect to each standard remote microphone input.

### Up to 40 Remote Microphones.

With two, A100-1240 Auxiliary Audio Input Modules connected, and five total A100-1274 Microphone Multiplex Modules, a total of 40 Remote Microphones are supported.

## Product Selection

**Table 1: Product selection**

SKU	Description
A100-1274	Microphone Multiplex Module
A4003-9803	Remote Microphone with on/off switch and ready-to-talk LED; control wiring connects to a A100-1290, 24 Point I/O module in the audio control panel

**Table 2: Installation Instruction Reference**

Document	Description
579-879AC	A100-1274 Microphone Mux Module Installation Instructions
579-881AC	A4003-9803 Remote Microphone Assembly Installation Instructions

**Table 3: Additional Product Reference**

Product	Data Sheet
4100ES Basic Panel Modules and Accessories	AC4100-0031
4100ES Emergency Voice/Alarm Communications Equipment	AC4100-0034
4100ES Remote Annunciator Panels	AC4100-0038

## A100-1274 Specifications

**Table 4: A100-1274 Microphone Multiplex Module**

Specification		Rating
A100-1274 Module size		One 4 x 5 block module
A100-1274 Mounting Location		Mount either in same cabinet or close-nipped to the cabinet housing the Audio Controller or Auxiliary Audio Input Module
Compatible Remote Microphone Input Sources		Digital Audio Controller Models, A100-1311
		Analog Audio Controller Model, A100-1210
		Auxiliary Audio Input Module, Model A100-1240
Auxiliary Audio Input Module Details		Connect to remote microphone outputs 3 and 4
		Up to two A100-1240 Auxiliary Audio Input Modules can be connected to a compatible Audio Controller Module
Input Voltage		24 VDC system power
Supervisory Current	No microphones active	171 mA
	1 microphone active	219 mA
	1 microphone active and keyed	258 mA
	Additional keyed microphones	Add 39 mA for each keyed microphone
	On-Board Supervised IAM	570 $\mu$ A, supplied by IDNet Signaling Line Circuit (SLC)
Audio Wiring Information (requires field wiring)	Connection between Microphone Multiplex Module and Remote Microphone Input	Use twisted, shielded pair (TSP) wiring to Audio Controller or Auxiliary Audio Input Module
	Remote Microphone Wiring	18 AWG (0.82 mm <sup>2</sup> ), TSP
	Remote Microphone Distance	4000 ft maximum (1220 m)
On-Board Supervised IAM Details and Wiring Information (requires field wiring)		Requires one IDNet address and one IDNet unit load; address is switch selected on-board
		Connect to the control panel IDNet communications source desired; wire using 18 AWG twisted pair

**Table 5: A4003-9803 Remote Microphone**

Specification	Rating
Power	24 VDC, system power from A100-1290, 24 Point I/O Module
Current	25 mA maximum in use
Wiring	18 AWG (0.82 mm <sup>2</sup> ), twisted, shielded pair (TSP) for microphone; 5 control wires for keyswitch, PTT switch, and LED control

**Table 6: General Environmental Specifications**

Specification	Rating
Operating Temperature	32° to 120° F (0° to 49° C)

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Specification	Rating
Operating Humidity Range	Up to 93% RH, non-condensing @ 90° F (32° C)

### A4003-9803 Remote Microphone Reference

