## **Application Notes**



### 1.22 PC5950 2-Way Audio Verification

### Panels:

POWER SERIES (PC1616/1832/1864 V4.2) PC5950 Module

### **Overview:**

The PC5950 provides talk/listen-in capability for audio verification alarms. The module permits the monitoring station to monitor microphones and communicate to the occupants through speakers, in accordance with SIA false alarm reduction legislation. The user can also remotely initiate audio monitoring of the premises using a touchtone phone.

Programming addressable zones has eight-step process:

- Connect the PC5950 to the KEYBUS
- Connect the speakers to the PC5950
- Program the central station phone number
- Program the account number
- Program the communicator format
- Enable two-way audio verification
- Programming the audio Control Options
- Programming the Miscellaneous audio control (Optional)
- Programming the Microphone input assignment
- Program the Audio Options (Optional)

### **Program Sections:**

Section [301]	Phone Number 1
Section [310]	Account Number
Section [350]	Communicator Format Option
Section [381], Opt 5 On	Telephone #1Two Way Audio Enable
Section [802], [30] – [37]	Zone Audio Control Options
Section [802], [38]	Miscellaneous Audio Control Options (Optional)
Section [802], [40] – [47]	Microphone input assignment
Section [802], [10]	Audio Options (Optional)

### Step 1 – Connect the PC5950 to the KEYBUS

Connect the four KEYBUS terminals of the PC5100 to the four KEYBUS terminals of the panel.

### Note: If the PC5950 module is not connected to the KEYBUS, Section [802] cannot be programmed.

#### Step 2 – Connect the speakers to the PC5950

Up to 4 audio stations (4 microphones and 2 speakers) can be connected to the PC5950 audio interface module. Each Audio Station mush be home-run to the interface module via shielded 22 gauge, 4 conductor cable. Each Audio Station can be up to 500ft (152m) from the PC5950. Do not wire the Keybus with shielded wire.

### Step 1 – Program the Telephone Number

Program the central station phone number in Section [301].

### Step 2 – Program the Account Number

Program the account number in Section [310]. If contact ID or Pulse format is required, also program Sections [311] thru [318] for Partition 1 thru 8.

# Note: If a pulse format or a Contact ID format is being used, program a HEX digit [A] for any digit '0' in the account number.

### Step 3 – Program the Communication Format

Program the communicator format in Section [350].

### Step 4 – Enable two way verification

To enable two-way audio verification for telephone number 1, enable Option [5] in Section [381].

### Step 5 – Program the Audio Control Options for zones 1 thru 64

At default, all zones are disabled and will not initiate a two-way session. Enter section [802] and then enter subsection [30] thru [37]. Toggle on every zones you want to initiate two-way audio.

### Step 6 – Program the Miscellaneous Control Options for miscellaneous events (Optional)

Stay in programming section [802] and enter subsection [38]. Toggle on any other event you want to initiate two-way audio such as duress alarms or an opening after alarms event.

### Step 7 – Program the Microphone input assignment for zones 1 thru 64

Stay in programming section [802] and enter subsection [40] thru [47]. Enter for each zone, which microphone (1 - 4) is closest to that zone. This will allow the central station operator to always speak to the closest speaker during a two-way session.

### Step 8 – Program the Audio Options (*Optional*)

Stay in programming section [802] and select subsection [10].

Enable option [5] if you want the PC5950 to detect the central station has dropped the two-way audio session. This will allow the central station to call the premise within 5 minutes, after the alarm, to start another two way audio session.

Enable option [6] to allow the end user to call the premise anytime to perform a two-way session regardless if an alarm has occurred. Refer to the PC5950 user manual for detailed instructions for this procedure.

### **Technical Tips:**

- 1. Ensure the panel is seizing the telephone line during the alarm communication and two-way session.
- 2. Ensure the siren is turning off during the alarm when the two-way session is in progress.
- 3. If you are using SIA FSK format to transmit alarms, the monitoring station should receive a [L90] reporting code after all the zone alarms transmit their reporting codes. This means the panel is telling the central station to "Listen In" for 90 seconds.

### Quick Test Procedure:

Arm the system in the away mode and generate an alarm. The siren should sound then turn off when the two way session starts. You will hear the central station operator switch between "talk" and Listen" by beeps and will be able to talk and listen to the operator.