AVIS: L'étiquette de l'Industrie Canada identifie le matériel homologué. Cette étiquette certifie que le matériel est conforme à certaines normes de protection, d'exploitation et de sécurité des réseaux de télécommunications. Industrie Canada n'assure toutefois pas que le matériel fonctionnera à la satisfaction de l'utilisateur.

Avant d'installer ce matériel, l'utilisateur doit s'assurer qu'il est permis de le raccorder aux installations de l'entreprise locale de télécommunication. Le matériel doit également être installé en suivant une méthode acceptée de raccordement. L'abonné ne doit pas oublier qu'il est possible que la conformité aux conditions énoncées ci-dessus n'empêchent pas la dégradation du service dans certaines situations.

Les réparations de matériel homologué doivent être effectuées par un centre d'entretien canadien autorisé désigné par le fournisseur. La compagnie de télécommunications peut demander à l'utilisateur de débrancher un appareil à la suite de réparations ou de modifications effectuées par l'utilisateur ou à cause de mauvais fonctionnement.

Pour sa propre protection, l'utilisateur doit s'assurer que tous les fils de mise à la terre de la source d'énergie électrique, les lignes téléphoniques et les canalisations d'eau métalliques, s'il y en a, sont raccordés ensemble. Cette précaution est particulièrement importante dans les régions rurales.

AVERTISSEMENT: L'utilisateur ne doit pas tenter de faire ces raccordements lui-même; il doit avoir recours à un service d'inspection des installations électriques, ou à un électricien, selon le cas.

L'indice de charge (IC) assigné a chaque dispositif terminal indique, pour éviter toute surcharge, le pourcentage de la charge totale qui peut être raccordée à un circuit téléphonique bouclé utilisé par ce dispositif. La terminaison du circuit bouclé peut être constituée de n'importe quelle combinaison de dispositifs, pourvu que la somme des indices de charge de l'ensemble des dispositifs ne dépasse pas 100.

L'Indice de charge de ce produit est 0.1B.

NOTICE: The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements. Industry Canada does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

User should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

CAUTION: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

The Load Number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop which is used by the device, to prevent overloading. The termination on a loop may consist of any combination of devices subject only to the requirement that the total of the Load Numbers of all the devices does not exceed 100.

The Load Number of this unit is 0.1B.

DSC erklærer herved at denne komponenten overholder alle viktige krav samt andre bestemmelser gitt i direktiv 1999/5/EC.

Por este meio, a DSC, declara que este equipamento está em conformidade com os requisitos essenciais e outras determinações relevantes da Directiva 1999/5/EC.

"DSC bekräftar härmed att denna apparat uppfyller de väsentliga kraven och andra relevanta bestämmelser i Direktivet 1999/5/EC".

Con la presente la Digital Security Controls Ltd dichiara che questo prodotto è conforme ai requisiti essenziali ed altre disposizioni rilevanti relative alla Direttiva 1999/05/CE.

"Por la presente, DSC, declara que este equipo cumple con los requisitos requeridos por la Directiva 1999/5/EC".

Hierdurch erklärt DSC, daß dieses Gerät den erforderlichen Bedingungen und Vorrausetzungen der Richtlinie 1999/5/EC entspricht.

'Δία του παρόντος, η DSC, δηλόνει ότι αυτή η συσκευή είναι σύμφωνη με τις ουσιώδης απαιτήσεις και με όλες τις άλλες σχετικές αναφορές της Οδηγίας 1999/5/EC".

Hierbij verklaart DSC dat dit toestel in overeenstemming is met de eisen en bepalingen van richtlijn 1999/5/EC.

Par la présente, DSC déclare que cet article est conforme aux éxigences essentielles et autres relevantes stipulations de la directive 1999/5/EC.

DSC vakuuttaa laitteen täyttävän direktiivin 1999/5/EC olennaiset vaatimukset.

Hereby, DSC, declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

The complete R & TTE Declaration of Conformity can be found at www.dsc.com/intl/rttedirect.htm.

CE

DSC®

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1-800-387-3630 • **www.dsc.com**
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WARNING

This manual contains information on limitations regarding product use and function and information on the limitations as to liability of the manufacturer. The entire manual should be carefully read.

Installation Manual

DSC® PowerSeries™

PC5936 v1.O

Limited Warranty

Digital Security Controls Ltd. warrants the original purchaser that for a period of twelve months from the date of purchase, the product shall be free of defects in materials and workmanship under normal use. During the warranty period, Digital Security Controls Ltd. shall, at its option, repair or replace any defective product upon return of the product to its factory, at no charge for labour and materials. Any replacement and/or repaired parts are warranted for the remainder of the original warranty or ninety (90) days, whichever is longer. The original purchaser must promptly notify Digital Security Controls Ltd. in writing that there is defect in material or workmanship, such written notice to be received in all events prior to expiration of the warranty period. There is absolutely no warranty on software and all software products are sold as a user license under the terms of the software license agreement included with the product. The Customer assumes all responsibility for the proper selection, installation, operation and maintenance of any products purchased from DSC. Custom products are only warranted to the extent that they do not function upon delivery. In such cases, DSC can replace or credit at its option.

International Warranty

The warranty for international customers is the same as for any customer within Canada and the United States, with the exception that Digital Security Controls Ltd. shall not be responsible for any customs fees, taxes, or VAT that may be due.

Warranty Procedure

To obtain service under this warranty, please return the item(s) in question to the point of purchase. All authorized distributors and dealers have a warranty program. Anyone returning goods to Digital Security Controls Ltd. must first obtain an authorization number. Digital Security Controls Ltd. will not accept any shipment whatsoever for which prior authorization has not been obtained.

Conditions to Void Warranty

This warranty applies only to defects in parts and workmanship relating to normal use. It does not cover:

- damage incurred in shipping or handling;
- damage caused by disaster such as fire, flood, wind, earthquake or lightning;
- damage due to causes beyond the control of Digital Security Controls Ltd. such as excessive voltage, mechanical shock or water damage;
- damage caused by unauthorized attachment, alterations, modifications or foreign objects;
- damage caused by peripherals (unless such peripherals were supplied by Digital Security Controls Ltd.);
- defects caused by failure to provide a suitable installation environment for the products;
- damage caused by use of the products for purposes other than those for which it was designed;
- damage from improper maintenance;
- damage arising out of any other abuse, mishandling or improper application of the products.

Items Not Covered by Warranty

In addition to the items which void the Warranty, the following items shall not be covered by Warranty: (i) freight cost to the repair centre; (ii) products which are not identified with DSC's product label and lot number or serial number; (iii) products disassembled or repaired in such a manner as to adversely affect performance or prevent adequate inspection or testing to verify any warranty claim. Access cards or tags returned for replacement under warranty will be credited or replaced at DSC's option. Products not covered by this warranty, or otherwise out of warranty due to age, misuse, or damage shall be evaluated, and a repair estimate shall be provided. No repair work will be performed until a valid purchase order is received from the Customer and a Return Merchandise Authorisation number (RMA) is issued by DSC's Customer Service.

Digital Security Controls Ltd.'s liability for failure to repair the product under this warranty after a reasonable number of attempts will be limited to a replacement of the product, as the exclusive remedy for breach of warranty. Under no circumstances shall Digital Security Controls Ltd. be liable for any special, incidental, or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability, or any other legal theory. Such damages include, but are not limited to, loss of profits, loss of the product or any associated equipment, cost of capital, cost of substitute or replacement equipment, facilities or services, down time, purchaser's time, the claims of third parties, including customers, and injury to property. The laws of some jurisdictions limit or do not allow the disclaimer of consequential damages. If the laws of such a jurisdiction apply to any claim by or against DSC, the limitations and disclaimers contained here shall be to the greatest extent permitted by law. Some states do not allow the exclusion or limitation of incidental or consequential damages, so that the above may not apply to you.

Disclaimer of Warranties

This warranty contains the entire warranty and shall be in lieu of any and all other warranties, whether expressed or implied (including all implied warranties of merchantability or fitness for a particular purpose) and of all other obligations or liabilities on the part of Digital Security Controls Ltd. Digital Security Controls Ltd. neither assumes responsibility nor authorizes any other person purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning this product.

This disclaimer of warranties and limited warranty are governed by the laws of the province of Ontario, Canada.

WARNING: Digital Security Controls Ltd. recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.

Out of Warranty Repairs

Digital Security Controls Ltd. will at its option repair or replace out-of-warranty products which are returned to its factory according to the following conditions. Anyone returning goods to Digital Security Controls Ltd. must first obtain an authorization number. Digital Security Controls Ltd. will not accept any shipment whatsoever for which prior authorization has not been obtained.

Products which Digital Security Controls Ltd. determines to be repairable will be repaired and returned. A set fee which Digital Security Controls Ltd. has predetermined and which may be revised from time to time, will be charged for each unit repaired.

Products which Digital Security Controls Ltd. determines not to be repairable will be replaced by the nearest equivalent product available at that time. The current market price of the replacement product will be charged for each replacement unit.

FCC COMPLIANCE STATEMENT

CAUTION: Changes or modifications not expressly approved by Digital Security Controls Ltd. could void your authority to use this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

The user may find the following booklet prepared by the FCC useful: "How to Identify and Resolve Radio/Television Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402, Stock # 004-000-00345-4.

Important Information

This equipment complies with Part 68 of the FCC Rules. On the side of this equipment is a label that contains, among other information, the FCC registration number of this equipment.

NOTIFICATION TO TELEPHONE COMPANY The customer shall notify the telephone company of the particular line to which the connection will be made, and provide the FCC registration number and the ringer equivalence of the protective circuit.

FCC Registration Number: F53CAN-31477-KX-N

Ringer Equivalence Number: 0.1B

USOC Jack: RJ-31X

Facility Interface Code: 02LS2

Service Order Code: 9.0F

TELEPHONE CONNECTION REQUIREMENTS Except for the telephone company provided ringers, all connections to the telephone network shall be made through standard plugs and telephone company provided jacks, or equivalent, in such a manner as to allow for easy, immediate disconnection of the terminal equipment. Standard jacks shall be so arranged that, if the plug connected thereto is withdrawn, no interference to the operation of the equipment at the customer's premises which remains connected to the telephone network shall occur by reason of such withdrawal.

INCIDENCE OF HARM Should terminal equipment or protective circuitry cause harm to the telephone network, the telephone company shall, where practicable, notify the customer that temporary disconnection of service may be required; however, where prior notice is not practicable, the telephone company may temporarily discontinue service if such action is deemed reasonable in the circumstances. In the case of such temporary discontinuance, the telephone company shall promptly notify the customer and will be given the opportunity to correct the situation.

ADDITIONAL TELEPHONE COMPANY INFORMATION The security control panel must be properly connected to the telephone line with a USOC RJ-31X telephone jack.

The FCC prohibits customer-provided terminal equipment be connected to party lines or to be used in conjunction with coin telephone service. Interconnect rules may vary from state to state.

CHANGES IN TELEPHONE COMPANY EQUIPMENT OR FACILITIES The telephone company may make changes in its communications facilities, equipment, operations or procedures, where such actions are reasonably required and proper in its business. Should any such changes render the customer's terminal equipment incompatible with the telephone company facilities the customer shall be given adequate notice to the effect modifications to maintain uninterrupted service.

RINGER EQUIVALENCE NUMBER (REN) The REN is useful to determine the quantity of devices that you may connect to your telephone line and still have all of those devices ring when your telephone number is called. In most, but not all areas, the sum of the RENs of all devices connected to one line should not exceed five (5.0). To be certain of the number of devices that you may connect to your line, you may want to contact your local telephone company.

EQUIPMENT MAINTENANCE FACILITY If you experience trouble with this telephone equipment, please contact the facility indicated below for information on obtaining service or repairs. The telephone company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

Digital Security Controls Ltd. 160 Washburn St., Lockport, NY 14094

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WARNING Please Read Carefully

Note to Installers

This warning contains vital information. As the only individual in contact with system users, it is your responsibility to bring each item in this warning to the attention of the users of this system.

System Failures

This system has been carefully designed to be as effective as possible. There are circumstances, however, involving fire, burglary, or other types of emergencies where it may not provide protection. Any alarm system of any type may be compromised deliberately or may fail to operate as expected for a variety of reasons. Some but not all of these reasons may be:

· Inadequate Installation
A security system must be installed properly in order to provide adequate protection. Every installation should be evaluated by a security professional to ensure that all access points and areas are covered. Locks and latches on windows and doors must be secure and operate as intended. Windows, doors, walls, ceilings and other building materials must be of sufficient strength and construction to provide the level of protection expected. A reevaluation must be done during and after any construction activity. An evaluation by the fire and/or police department is highly recommended if this service is available.

· Criminal Knowledge
This system contains security features which were known to be effective at the time of manufacture. It is possible for persons with criminal intent to develop techniques which reduce the effectiveness of these features. It is important that a security system be reviewed periodically to ensure that its features remain effective and that it be updated or replaced if it is found that it does not provide the protection expected.

· Access by Intruders
Intruders may enter through an unprotected access point, circumvent a sensing device, evade detection by moving through an area of insufficient coverage, disconnect a warning device, or interfere with or prevent the proper operation of the system.

· Power Failure
Control units, intrusion detectors, smoke detectors and many other security devices require an adequate power supply for proper operation. If a device operates from batteries, it is possible for the batteries to fail. Even if the batteries have not failed, they must be charged, in good condition and installed correctly. If a device operates only by AC power, any interruption, however brief, will render that device inoperative while it does not have power. Power interruptions of any length are often accompanied by voltage fluctuations which may damage electronic equipment such as a security system. After a power interruption has occurred, immediately conduct a complete system test to ensure that the system operates as intended.

· Failure of Replaceable Batteries
This system's wireless transmitters have been designed to provide several years of battery life under normal conditions. The expected battery life is a function of the device environment, usage and type. Ambient conditions such as high humidity, high or low temperatures, or large temperature fluctuations may reduce the expected battery life. While each transmitting device has a low battery monitor which identifies when the batteries need to be replaced, this monitor may fail to operate as expected. Regular testing and maintenance will keep the system in good operating condition.

· Compromise of Radio Frequency (Wireless) Devices
Signals may not reach the receiver under all circumstances which could include metal objects placed on or near the radio path or deliberate jamming or other inadvertent radio signal interference.

· System Users
A user may not be able to operate a panic or emergency switch possibly due to permanent or temporary physical disability, inability to reach the device in time, or unfamiliarity with the correct operation. It is important that all system users be trained in the correct operation of the alarm system and that they know how to respond when the system indicates an alarm.

· Smoke Detectors
Smoke detectors that are a part of this system may not properly alert occupants of a fire for a number of reasons, some of which follow. The smoke detectors may have been improperly installed or positioned. Smoke may not be able to reach the smoke detectors, such as when the fire is in a chimney, walls or roofs, or on the other side of closed doors. Smoke detectors may not detect smoke from fires on another level of the residence or building.

Every fire is different in the amount of smoke produced and the rate of burning. Smoke detectors cannot sense all types of fires equally well. Smoke detectors may not provide timely warning of fires caused by carelessness or safety hazards such as smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloaded electrical circuits, children playing with matches or arson.

Even if the smoke detector operates as intended, there may be circumstances when there is insufficient warning to allow all occupants to escape in time to avoid injury or death.

· Motion Detectors
Motion detectors can only detect motion within the designated areas as shown in their respective installation instructions. They cannot discriminate between intruders and intended occupants. Motion detectors do not provide volumetric area protection. They have multiple beams of detection and motion can only be detected in unobstructed areas covered by these beams. They cannot detect motion which occurs behind walls, ceilings, floor, closed doors, glass partitions, glass doors or windows. Any type of tampering whether intentional or unintentional such as masking, painting, or spraying of any material on the lenses, mirrors, windows or any other part of the detection system will impair its proper operation.

Passive infrared motion detectors operate by sensing changes in temperature. However their effectiveness can be reduced when the ambient temperature rises near or above body temperature or if there are intentional or unintentional sources of heat in or near the detection area. Some of these heat sources could be heaters, radiators, stoves, barbeques, fireplaces, sunlight, steam vents, lighting and so on.

· Warning Devices
Warning devices such as sirens, bells, horns, or strobes may not warn people or waken someone sleeping if there is an intervening wall or door. If warning devices are located on a different level of the residence or premise, then it is less likely that the occupants will be alerted or awakened. Audible warning devices may be interfered with by other noise sources such as stereos, radios, televisions, air conditioners or other appliances, or passing traffic. Audible warning devices, however loud, may not be heard by a hearing-impaired person.

· Telephone Lines
If telephone lines are used to transmit alarms, they may be out of service or busy for certain periods of time. Also an intruder may cut the telephone line or defeat its operation by more sophisticated means which may be difficult to detect.

· Insufficient Time
There may be circumstances when the system will operate as intended, yet the occupants will not be protected from the emergency due to their inability to respond to the warnings in a timely manner. If the system is monitored, the response may not occur in time to protect the occupants or their belongings.

· Component Failure
Although every effort has been made to make this system as reliable as possible, the system may fail to function as intended due to the failure of a component.

· Inadequate Testing
Most problems that would prevent an alarm system from operating as intended can be found by regular testing and maintenance. The complete system should be tested weekly and immediately after a break-in, an attempted break-in, a fire, a storm, an earthquake, an accident, or any kind of construction activity inside or outside the premises. The testing should include all sensing devices, keypads, consoles, alarm indicating devices and any other operational devices that are part of the system.

· Security and Insurance
Regardless of its capabilities, an alarm system is not a substitute for property or life insurance. An alarm system also is not a substitute for property owners, renters, or other occupants to act prudently to prevent or minimize the harmful effects of an emergency situation.

[63] Music Broadcast Mask Two

Default		Option	ON	OFF
ON	⌊__⌋	1	Port 8 Music Broadcast Enabled	
ON	⌊__⌋	2	Port 9 Music Broadcast Enabled	Disabled
ON	⌊__⌋	3	Port 10 Music Broadcast Enabled	Disabled
ON	⌊__⌋	4	Port 11 Music Broadcast Enabled	Disabled
ON	⌊__⌋	5	Port 12 Music Broadcast Enabled	Disabled
ON	⌊__⌋	6	Port 13 Music Broadcast Enabled	Disabled
ON	⌊__⌋	7	Port 14 Music Broadcast Enabled	Disabled
ON	⌊__⌋	8	Port 15 Music Broadcast Enabled	Disabled

[70] Doorstrike Activation Mask

Default		Option	ON	OFF
OFF	⌊__⌋	1	For Future Use	
OFF	⌊__⌋	2	Port 1 Enabled to Activate Doorstrike	Disabled
OFF	⌊__⌋	3	Port 2 Enabled to Activate Doorstrike	Disabled
OFF	⌊__⌋	4	Port 3 Enabled to Activate Doorstrike	Disabled
OFF	⌊__⌋	5	Port 4 Enabled to Activate Doorstrike	Disabled
OFF	⌊__⌋	6	Port 5 Enabled to Activate Doorstrike	Disabled
OFF	⌊__⌋	7	Port 6 Enabled to Activate Doorstrike	Disabled
OFF	⌊__⌋	8	Port 7 Enabled to Activate Doorstrike	Disabled

[71] Doorstrike Activation Mask Two

Default		Option	ON	OFF
OFF	⌊__⌋	1	For Future Use	
OFF	⌊__⌋	2	Port 8 Enabled to Activate Doorstrike	Disabled
OFF	⌊__⌋	3	Port 9 Enabled to Activate Doorstrike	Disabled
OFF	⌊__⌋	4	Port 10 Enabled to Activate Doorstrike	Disabled
OFF	⌊__⌋	5	Port 11 Enabled to Activate Doorstrike	Disabled
OFF	⌊__⌋	6	Port 13 Enabled to Activate Doorstrike	Disabled
OFF	⌊__⌋	7	Port 14 Enabled to Activate Doorstrike	Disabled
OFF	⌊__⌋	8	Port 15 Enabled to Activate Doorstrike	Disabled

Doorstrike PGM Options

00 Null Key
13 Command Output 1 [*][7][1] Utility Output
14 Command Output 2 [*][7][2] Sensor Reset (clear for WSS)
19 Command Output 3 [*][7][3]
21 Command Output 4 [*][7][4]

[72] Doorstrike PGM Option Programming

Enter the appropriate PGM option
(00=Null Key, 13=Utility Ouptut, 14=Sensor Reset)

Default
00 ⌊__⌋__⌋ PGM Option

[58] Ninth Audio Control Options

Default	Option	ON	OFF
OFF	1	Tampers Enabled	Disabled
OFF	2	Openings & Closings Enabled	Disabled
OFF	3	[A] Key Alarm Enabled (Listen)	Disabled
OFF	4	[P] Key Alarm Enabled (Listen)	Disabled
OFF	5	Duress Alarm Enabled	Disabled
OFF	6	Zone Expander Superv. Alarm Enabled	Disabled
OFF	7	Opening After Alarm Enabled	Disabled
OFF	8	For Future Use	

[60] Telephone Ring Mask

Default	Option	ON	OFF
OFF	1	For Future Use	
OFF	2	Port 1 Telephone Ring Enabled	Disabled
OFF	3	Port 2 Telephone Ring Enabled	Disabled
OFF	4	Port 3 Telephone Ring Enabled	Disabled
OFF	5	Port 4 Telephone Ring Enabled	Disabled
OFF	6	Port 5 Telephone Ring Enabled	Disabled
OFF	7	Port 6 Telephone Ring Enabled	Disabled
OFF	8	Port 7 Telephone Ring Enabled	Disabled

[61] Telephone Ring Mask Two

Default	Option	ON	OFF
OFF	1	Port 8 Telephone Ring Enabled	Disabled
OFF	2	Port 9 Telephone Ring Enabled	Disabled
OFF	3	Port 10 Telephone Ring Enabled	Disabled
OFF	4	Port 11 Telephone Ring Enabled	Disabled
OFF	5	Port 12 Telephone Ring Enabled	Disabled
OFF	6	Port 13 Telephone Ring Enabled	Disabled
OFF	7	Port 14 Telephone Ring Enabled	Disabled
OFF	8	Port 15 Telephone Ring Enabled	Disabled

[62] Music Broadcast Mask One

Default	Option	ON	OFF
OFF	1	For Future Use	
ON	2	Port 1 Music Broadcast Enabled	Disabled
ON	3	Port 2 Music Broadcast Enabled	Disabled
ON	4	Port 3 Music Broadcast Enabled	Disabled
ON	5	Port 4 Music Broadcast Enabled	Disabled
ON	6	Port 5 Music Broadcast Enabled	Disabled
ON	7	Port 6 Music Broadcast Enabled	Disabled
ON	8	Port 7 Music Broadcast Enabled	Disabled

Section 1: Introduction

1.1 Specifications

It is recommended that a 7Ah battery (minimum) be used on the PC5020 when the PC5936 is used.

NOTE: In order for the PC5936 module to operate properly, the power output capability from the AUX terminals combined must not be exceeded. Use the data presented below to ensure that the PC5936 module is not overloaded when connecting audio stations.

Compatible Panels

PC5008 v2.1 and higher
PC5010 v2.0 / P-832 v2.0
PC5015 v2.2 and higher / P-832DL v2.2 and higher
PC5020 v3.0 and higher / P-8+ v3.0 and higher

NOTE: The Verbal Door Chime and Verbal Alarm features are only available when using the PC5020 v3.1 and higher.

PC5936 Audio Interface Module

- Standby current draw - 65 mA
- Maximum current draw - 100 mA
- Total current-providing capability between AUX terminals - 500 mA
- Input impedance at any microphone input - 25kΩ
- Maximum music input signal level amplitude - 200mV peak to peak
- Connect up to 7 audio stations (interior or exterior)
- Page function
- Monitor function
- Answer incoming calls
- Alarm output follower

PC5937 Eight-port Expansion Module

- Current draw - 5 mA
- Connect up to 8 audio stations (interior or exterior)
- Total current-providing capability between AUX terminals - 500 mA
- Input impedance at any microphone input - 25kΩ
- Maximum music input signal level amplitude - 200 mV peak to peak

PC5921/P5922 Interior Audio Station

- Standby current draw - 20 mA
- Maximum current draw - 50 mA
- Built-in speaker and microphone

PC5921EXT/P5922EXT Exterior Audio Station

- Standby current draw - 20 mA
- Maximum current draw - 50 mA
- Built-in speaker and microphone

PC5921EXT/R / P5922 EXT/R Exterior Audio Station

- Standby current draw - 20 mA
- Maximum current draw - 50 mA
- Built-in speaker and microphone
- Relay output for doorbell circuit connection

PC5904 Central Station Talk/Listen Module

- Standby current draw - 30 mA
- Maximum current draw - 175 mA
- Built in microphone and 3.5 in. speaker

1.2 Additional Devices

PC5937 Eight Port Expansion Module

The PC5937 adds 8 more ports to the PC5936 audio interface module.

PC5921 Interior Audio Station

Each station has a separate microphone and speaker. Each station must be home-run to the interface module using shielded 22 gauge, 4-conductor wire. Each station can be used to initiate or receive pages, answer incoming calls, answer the doorbell, monitor rooms or sound an alarm follower.

PC5921EXT / P5922EXT Exterior Audio Station

The PC5921/P5922EXT exterior audio station is housed in a gray fade-resistant case, designed for outside use. Each station has a separate microphone and speaker. Each station must be home-run to the interface module using shielded 22 gauge, 4-conductor wire. The station can be used to sound the doorbell chime on interior audio stations.

PC5921EXT/R / P5922EXT/R Exterior Audio Station

The PC5921/P5922EXT/R exterior audio station is housed in a gray fade-resistant case, designed for outside use. Each station has a separate microphone and speaker. Each station must be home-run to the interface module using shielded 22 gauge, 4 conductor wire. The station can be used to sound the doorbell chime on interior audio stations. A relay is included so that a pre-existing doorbell can be used.

PC5904 Central Station Talk/Listen Module

The PC5904 interior central station talk/listen* module is used in conjunction with the PC5936 audio interface module for talk/listen-in purposes. While all other station types can provide talk/listen-in capabilities, this station provides an added level of volume to the central station operator's voice. Each station has a separate microphone and speaker. Each station must be home-run to the interface module using shielded 22 gauge, 4-conductor wire. All stations can be used to sound an alarm follower.

NOTE: EXT audio stations should always be shielded when installed in harsh environments.

** The talk/listen feature must not be used for UL Listed applications.*

[54] First Audio Control Options

Default	Option	ON	OFF
OFF	1	Zone 33 Alarm Enabled	
OFF	2	Zone 34 Alarm Enabled	Disabled
OFF	3	Zone 35 Alarm Enabled	Disabled
OFF	4	Zone 36 Alarm Enabled	Disabled
OFF	5	Zone 37 Alarm Enabled	Disabled
OFF	6	Zone 38 Alarm Enabled	Disabled
OFF	7	Zone 39 Alarm Enabled	Disabled
OFF	8	Zone 40 Alarm Enabled	Disabled

[55] Second Audio Control Options

Default	Option	ON	OFF
OFF	1	Zone 41 Alarm Enabled	
OFF	2	Zone 42 Alarm Enabled	Disabled
OFF	3	Zone 43 Alarm Enabled	Disabled
OFF	4	Zone 44 Alarm Enabled	Disabled
OFF	5	Zone 45 Alarm Enabled	Disabled
OFF	6	Zone 46 Alarm Enabled	Disabled
OFF	7	Zone 47 Alarm Enabled	Disabled
OFF	8	Zone 48 Alarm Enabled	Disabled

[56] Third Audio Control Options

Default	Option	ON	OFF
OFF	1	Zone 49 Alarm Enabled	
OFF	2	Zone 50 Alarm Enabled	Disabled
OFF	3	Zone 51 Alarm Enabled	Disabled
OFF	4	Zone 52 Alarm Enabled	Disabled
OFF	5	Zone 53 Alarm Enabled	Disabled
OFF	6	Zone 54 Alarm Enabled	Disabled
OFF	7	Zone 55 Alarm Enabled	Disabled
OFF	8	Zone 56 Alarm Enabled	Disabled

[57] Fourth Audio Control Options

Default	Option	ON	OFF
OFF	1	Zone 57 Alarm Enabled	
OFF	2	Zone 58 Alarm Enabled	Disabled
OFF	3	Zone 59 Alarm Enabled	Disabled
OFF	4	Zone 60 Alarm Enabled	Disabled
OFF	5	Zone 61 Alarm Enabled	Disabled
OFF	6	Zone 62 Alarm Enabled	Disabled
OFF	7	Zone 63 Alarm Enabled	Disabled
OFF	8	Zone 64 Alarm Enabled	Disabled

[50] First Audio Control Options

Default	Option	ON	OFF
OFF	1	Zone 1 Alarm Enabled	
OFF	2	Zone 2 Alarm Enabled	Disabled
OFF	3	Zone 3 Alarm Enabled	Disabled
OFF	4	Zone 4 Alarm Enabled	Disabled
OFF	5	Zone 5 Alarm Enabled	Disabled
OFF	6	Zone 6 Alarm Enabled	Disabled
OFF	7	Zone 7 Alarm Enabled	Disabled
OFF	8	Zone 8 Alarm Enabled	Disabled

[51] Second Audio Control Options

Default	Option	ON	OFF
OFF	1	Zone 9 Alarm Enabled	
OFF	2	Zone 10 Alarm Enabled	Disabled
OFF	3	Zone 11 Alarm Enabled	Disabled
OFF	4	Zone 12 Alarm Enabled	Disabled
OFF	5	Zone 13 Alarm Enabled	Disabled
OFF	6	Zone 14 Alarm Enabled	Disabled
OFF	7	Zone 15 Alarm Enabled	Disabled
OFF	8	Zone 16 Alarm Enabled	Disabled

[52] Third Audio Control Options

Default	Option	ON	OFF
OFF	1	Zone 17 Alarm Enabled	
OFF	2	Zone 18 Alarm Enabled	Disabled
OFF	3	Zone 19 Alarm Enabled	Disabled
OFF	4	Zone 20 Alarm Enabled	Disabled
OFF	5	Zone 21 Alarm Enabled	Disabled
OFF	6	Zone 22 Alarm Enabled	Disabled
OFF	7	Zone 23 Alarm Enabled	Disabled
OFF	8	Zone 24 Alarm Enabled	Disabled

[53] Fourth Audio Control Options

Default	Option	ON	OFF
OFF	1	Zone 25 Alarm Enabled	
OFF	2	Zone 26 Alarm Enabled	Disabled
OFF	3	Zone 27 Alarm Enabled	Disabled
OFF	4	Zone 28 Alarm Enabled	Disabled
OFF	5	Zone 29 Alarm Enabled	Disabled
OFF	6	Zone 30 Alarm Enabled	Disabled
OFF	7	Zone 31 Alarm Enabled	Disabled
OFF	8	Zone 32 Alarm Enabled	Disabled

Section 2: Getting Started

2.1 Installation Steps

The PC5936 module must be installed by SERVICE PERSONNEL ONLY. It must be installed in a metallic cabinet properly grounded. It is the installer's responsibility to ensure such degree of protection for the equipment that NO ACCESS to the TNV circuit is given to the end user. The metallic cabinet must be secured to the building structure before operation. A proper ground connection must be provided for the metal cabinet. Internal wiring must be routed in a manner that prevents:

- excessive strain on wire and on terminal connections
- loosening of terminal connections
- damage to conductor insulation

Follow these steps to install the PC5936 audio interface module and audio stations. Review this section to get an overall understanding of the order of installation. Once this is done, carefully work through each step.

Step 1 Mounting the PC5936 Audio Interface Module

Mount the cabinet close to the control panel, as the PC5936 must be connected to the incoming telephone line. Before attaching the cabinet to the wall make sure to press the nylon circuit board mounting studs into the cabinet from the back.

Step 2 Connecting the PC5937 Module (optional)

To add 8 ports to the system, connect the PC5937 to the PC5936 module. See the PC5937 *Installation Sheet* for instructions.

Step 3 Wiring the Keybus

Wire the Keybus to the PC5936 audio interface module according to the diagram provided in 2.2 'Keybus Wiring' page 4.

Step 4 Wiring the Audio Stations

Wire each audio station according to the diagram provided in 2.4 'Audio Station Wiring' page 5.

Step 5 Wiring the Incoming Telephone Line

Wire the incoming telephone line according to the diagram provided in 2.5 'Telephone Line Connection' page 6.

Step 6 Supervision of the PC5936

The PC5936 will function upon power-up; however, full supervision of the module must be enabled in the panel.

Step 7 Program the Panel

The PC5936 audio interface module programming can be done from any PowerSeries keypad. Refer to the *Audio Interface Programming Worksheets* for program items and options.

Helpful Installation Tips

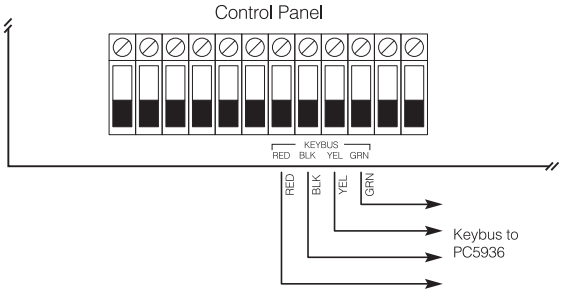
Feedback

If an intercom station appears to be exhibiting feedback noise, check the following for potential causes.

- Microphone - Remove the backplate. The microphone and holder are located in the bottom-left corner. Ensure that the microphone is pushed fully into the black rubber holder so that the face of it is flat against the rubber.
- Speaker - Ensure that the felt is secured around the speaker.
- Gain Control - Remove the backplate. The speaker volume control is located directly above the microphone and the microphone sensitivity control is located directly beneath the speaker. Turning either of these controls counter clockwise will reduce their gain, thereby reducing the possible level of feedback.
- Placement - Avoid installing intercom stations directly across from one another. Feedback may also occur due to room acoustics which will be affected by several different factors such as the size of the room, whether or not the floor is carpeted and different objects that may be in the room. Try moving one of the intercom stations to correct the problem.
- Ventilation - In some extreme instances the station may be feeding back to itself. The speaker output may be feeding back into the microphone within the housing. To eliminate this, open a hole through the wall equal in size to the rectangular opening in the backplate to allow the sound to escape.

2.2 Keybus Wiring

The PC5936 audio interface module has 4 terminals marked Keybus (red, black, yellow and green). Connect the four Keybus terminals on the PC5936 to the four terminals on the control panel marked Keybus (red, black, yellow and green).



[32] **Audio Duration**

Default

90 |__|__| (Valid Entries are 01-99 seconds)

Audio Control Telephone Key Functions

00 For Future Use
01 Talk to All Speakers
02 For Future Use
03 High Gain Listen to All
04 For Future Use
05 For Future Use
06 Low Gain Listen to All
07 Extend Time
08 For Future Use
09 Terminate Session
10 For Future Use
11 Cancel First Keypress
12 For Future Use
13 Zone Select (0 - 3 only)
14 Increment Selected Microphone (input)
15 Decrement Selected Microphone (input)
16 For Future Use
17 Mode Key

[40] **Audio Control Telephone Key Programming**

Default

01 |__|__|	[1] Key
00 |__|__|	[2] Key
03 |__|__|	[3] Key
14 |__|__|	[4] Key
15 |__|__|	[5] Key
06 |__|__|	[6] Key
07 |__|__|	[7] Key
00 |__|__|	[8] Key
17 |__|__|	[9] Key
00 |__|__|	[0] Key
17 |__|__|	[*] Key
11 |__|__|	[#] Key

[41] **Audio Control Telephone Mode Key Programming**

Default

00 |__|__|	[Mode Key] & [1] Key
00 |__|__|	[Mode Key] & [2] Key
00 |__|__|	[Mode Key] & [3] Key
00 |__|__|	[Mode Key] & [4] Key
00 |__|__|	[Mode Key] & [5] Key
00 |__|__|	[Mode Key] & [6] Key
00 |__|__|	[Mode Key] & [7] Key
00 |__|__|	[Mode Key] & [8] Key
09 |__|__|	[Mode Key] & [9] Key
00 |__|__|	[Mode Key] & [0] Key
00 |__|__|	[Mode Key] & [*] Key
00 |__|__|	[Mode Key] & [#] Key

[20] **First General Broadcast Mask**

Default	Option	ON	OFF
OFF	1	For Future Use	
OFF	2	Incoming Sounds on Port 1 Enabled	Disabled
ON	3	Incoming Sounds on Port 2 Enabled	Disabled
ON	4	Incoming Sounds on Port 3 Enabled	Disabled
ON	5	Incoming Sounds on Port 4 Enabled	Disabled
ON	6	Incoming Sounds on Port 5 Enabled	Disabled
ON	7	Incoming Sounds on Port 6 Enabled	Disabled
ON	8	Incoming Sounds on Port 7 Enabled	Disabled

[21] **Second General Broadcast Mask**

Default	Option	ON	OFF
ON	1	Incoming Sounds on Port 8 Enabled	Disabled
ON	2	Incoming Sounds on Port 9 Enabled	Disabled
ON	3	Incoming Sounds on Port 10 Enabled	Disabled
ON	4	Incoming Sounds on Port 11 Enabled	Disabled
ON	5	Incoming Sounds on Port 12 Enabled	Disabled
ON	6	Incoming Sounds on Port 13 Enabled	Disabled
ON	7	Incoming Sounds on Port 14 Enabled	Disabled
ON	8	Incoming Sounds on Port 15 Enabled	Disabled

[30] **Audio Options**

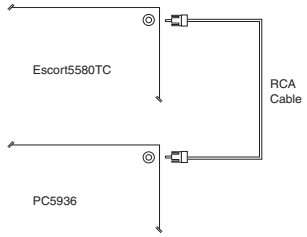
Default	Option	ON	OFF
OFF	1	Follower Enabled	Disabled
OFF	2	Listen to All Zones When On-Line	Listen Only to Zones In Alarm
OFF	3	Page Listens to All	Page Waits for Answer
OFF	4	Doorbell Listens to All	Doorbell Waits for Answer
OFF	5	Bell Silenced During Verbal Alarm	Bell Active During Verbal Alarm Prompts
OFF	6	Audio Link Enabled	Disabled
OFF	7	For Future Use	
OFF	8	For Future Use	

[31] **Audio Options Two (For Future Use)**

Default	Option	ON	OFF
OFF	1	For Future Use	
OFF	2	For Future Use	
OFF	3	For Future Use	
OFF	4	For Future Use	
OFF	5	For Future Use	
OFF	6	For Future Use	
OFF	7	For Future Use	
OFF	8	For Future Use	

2.3 Audio Link Connection *(see section 4.5, Audio Options,Option [6])*

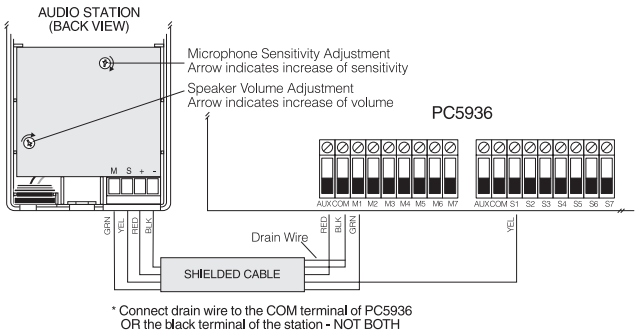
The PC5936 audio interface module has an RCA jack marked AUDIO. Connect the RCA jack on the PC5936 to the RCA jack found on the Escort5580TC. This can be used for audio help and verbal prompts instead of the telephone line.



2.4 Audio Station Wiring

Up to 7 audio stations can be connected to the PC5936 audio interface module. Each station must be home-run to the interface module via a shielded 22 gauge, 4-conductor cable. Each PC5921 can be up to 1000ft (304.8m) from the PC5936; each PC5904 can be up to 500ft (152.4m) from the PC5936.

Connect each station to power (red - AUX, black - COM) and to the proper audio connections on the PC5936 module (yellow - speaker, green - microphone). Connect the drain wire of the shield



to the COM terminal on the PC5936 module or the black terminal of the station (make sure the drain wire of the shield does not short anything on the back of the board), but not both.
Refer to the diagram below:

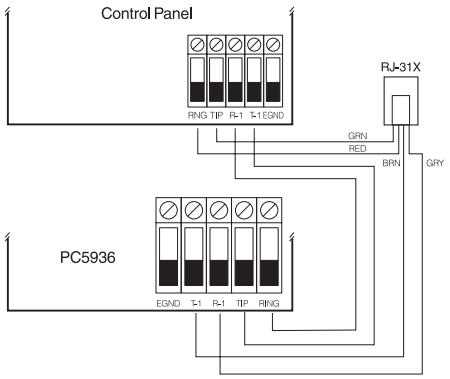
Avoiding Audio Station Interference Noise

The Keybus wiring and several different electrical devices (fluorescent lighting, etc.) may induce noise onto the intercom wires. For this reason shielded wire should be used whenever possible. If shielded wire is not used, each intercom wire must be spaced a minimum of 4 ft./1.2 m from all Keybus wiring, electrical wiring, fluorescent lighting and other sources of electrical interference. If this is not possible, shielded wire must be used with the drain of the shield connected as indicated in the above diagram.

2.5 Telephone Line Connection

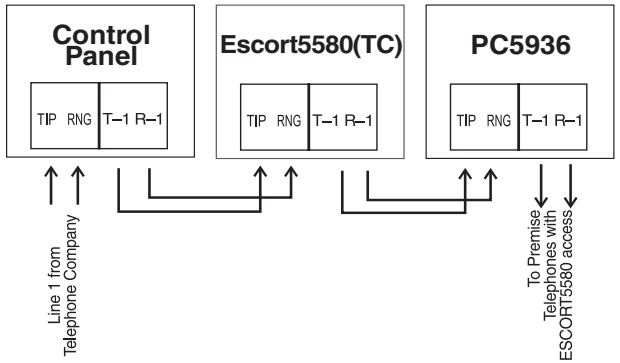
The PC5936 has 4 terminals for the telephone line connection (TIP, RING, T1 and R1). The wiring must be as follows:

- Incoming line - main control panel TIP and RING
- Main control panel T1 and R1 - PC5936 TIP and RING
- PC5936 T1 and R1 - house telephone



NOTE: If there is an Escort5580(TC) on the system, connect the modules to the telephone line as shown below.

NOTE: Connect the control panel and any other modules used in the order shown below:



2.6 Music Input Wiring

The music input must be wired to a single port, using an audio signal which does not exceed 200mV peak to peak. To do this, connect the music source to the microphone input for a port:

- connect one side of the source to the microphone input - one of terminals M1 to M7, or M8 to M15 (if a PC5937 is used).
- connect the other side to a COM terminal.

Program the port to which the music source is connected for music input. See section 4.1 ‘Port Definitions’ page 12.

[15] **Port Assignments (Zones 41-48)**
Enter the nearest intercom port number (01-15, 00=not used)
Default

00 |__|__| Zone 41 Port Assignment
00 |__|__| Zone 42 Port Assignment
00 |__|__| Zone 43 Port Assignment
00 |__|__| Zone 44 Port Assignment
00 |__|__| Zone 45 Port Assignment
00 |__|__| Zone 46 Port Assignment
00 |__|__| Zone 47 Port Assignment
00 |__|__| Zone 48 Port Assignment

[16] **Port Assignments (Zones 49-56)**
Enter the nearest intercom port number (01-15, 00=not used)
Default

00 |__|__| Zone 49 Port Assignment
00 |__|__| Zone 50 Port Assignment
00 |__|__| Zone 51 Port Assignment
00 |__|__| Zone 52 Port Assignment
00 |__|__| Zone 53 Port Assignment
00 |__|__| Zone 54 Port Assignment
00 |__|__| Zone 55 Port Assignment
00 |__|__| Zone 56 Port Assignment

[17] **Port Assignments (Zones 57-64)**
Enter the nearest intercom port number (01-15, 00=not used)
Default

00 |__|__| Zone 57 Port Assignment
00 |__|__| Zone 58 Port Assignment
00 |__|__| Zone 59 Port Assignment
00 |__|__| Zone 60 Port Assignment
00 |__|__| Zone 61 Port Assignment
00 |__|__| Zone 62 Port Assignment
00 |__|__| Zone 63 Port Assignment
00 |__|__| Zone 64 Port Assignment

[18] **Keypad - Port Assignments**
Enter the nearest intercom port number (01-15, 00=not used)
Default

00 |__|__| Keypad 1 Port Assignment
00 |__|__| Keypad 2 Port Assignment
00 |__|__| Keypad 3 Port Assignment
00 |__|__| Keypad 4 Port Assignment
00 |__|__| Keypad 5 Port Assignment
00 |__|__| Keypad 6 Port Assignment
00 |__|__| Keypad 7 Port Assignment
00 |__|__| Keypad 8 Port Assignment

[11] **Port Assignments (Zones 9-16)**
Enter the nearest intercom port number (01-15, 00=not used)
Default

00	___	Zone 9 Port Assignment
00	___	Zone 10 Port Assignment
00	___	Zone 11 Port Assignment
00	___	Zone 12 Port Assignment
00	___	Zone 13 Port Assignment
00	___	Zone 14 Port Assignment
00	___	Zone 15 Port Assignment
00	___	Zone 16 Port Assignment

[12] **Port Assignments (Zones 17-24)**
Enter the nearest intercom port number (01-15, 00=not used)
Default

00	___	Zone 17 Port Assignment
00	___	Zone 18 Port Assignment
00	___	Zone 19 Port Assignment
00	___	Zone 20 Port Assignment
00	___	Zone 21 Port Assignment
00	___	Zone 22 Port Assignment
00	___	Zone 23 Port Assignment
00	___	Zone 24 Port Assignment

[13] **Port Assignments (Zones 25-32)**
Enter the nearest intercom port number (01-15, 00=not used)
Default

00	___	Zone 25 Port Assignment
00	___	Zone 26 Port Assignment
00	___	Zone 27 Port Assignment
00	___	Zone 28 Port Assignment
00	___	Zone 29 Port Assignment
00	___	Zone 30 Port Assignment
00	___	Zone 31 Port Assignment
00	___	Zone 32 Port Assignment

[14] **Port Assignments (Zones 33-40)**
Enter the nearest intercom port number (01-15, 00=not used)
Default

00	___	Zone 33 Port Assignment
00	___	Zone 34 Port Assignment
00	___	Zone 35 Port Assignment
00	___	Zone 36 Port Assignment
00	___	Zone 37 Port Assignment
00	___	Zone 38 Port Assignment
00	___	Zone 39 Port Assignment
00	___	Zone 40 Port Assignment

Section 3: Audio Functions

3.1 Paging

Users can page people on the premises using the intercom stations.

NOTE: Only one page can be performed at a time.

To initiate a page press the Page/Answer button on any station. The station beeps twice. If no beeps are heard it is because another conversation is already taking place. If the page is successful all other stations that are not on 'Do Not Disturb' will sound a rapid beep. Talk into the audio station. The system broadcasts your voice to all other interior audio stations.

To answer the page, press the Page/Answer button on another station. The station beeps twice to indicate that a connection is established between the intercom stations where the page was initiated and answered. No other station will transmit the conversation.

The PC5936 automatically detects the source of the loudest voice and uses this to control the direction of conversation. During a page, the Do Not Disturb (DND) light will be on when the microphone of the intercom station is active.

To end a page, either person can press the Page/Answer button. If the PC5936 detects silence for 30 seconds, it will end the page.

3.2 Page Listens To All

You can program the system so that when a page is initiated, users at all other intercom stations can respond handsfree for 30 seconds (i.e., without pressing the Page/Answer button). Ports in DND mode, or which have the Paging/Monitoring/Doorbell Sounds option turned off will not be able to answer the page.

A user who wants to talk for longer than 30 seconds can press the Page/Answer button to establish a private communication link. If the page is not answered within 30 seconds, it will time out.

3.3 Cancelling a Page

To cancel a page, press the Page/Answer button a second time. The page will automatically be cancelled if there is no response in 30 seconds.

3.4 Do Not Disturb

To avoid receiving pages, doorbox exterior intercom station calls or incoming telephone calls, users can put a station on Do Not Disturb (DND). To do this, press the Do Not Disturb button on the station. The Do Not Disturb light on the station will come on to indicate the unit is in Do Not Disturb mode.

To take a station off DND, press the Do Not Disturb button again. The Do Not Disturb light on the station will go out.

3.5 Answering Doorbells

Exterior stations (PC5921/P5922EXT, PC5921/P5922EXT/R) can be programmed as doorbox 1 or doorbox 2 for doorbell operation. When someone presses the button on a doorbox 1 station, it will

broadcast a “dingdong” sound over the system. Doorbox 2 will broadcast a “dong” sound over the system.

To answer the doorbell users can press the Page/Answer button on any station. The audio channel will operate the same as it does for a page.

If a page is in progress when a doorbell is pressed the two persons on the page will hear the tone. To answer the doorbell either person can press the Page/Answer button. The page will end and the user will immediately be connected to the doorbox station.

3.6 Opening the Door

You can program any intercom station to open the door (using a doorstrike module) while in communication with a doorbox station. After answering a doorbell on an intercom station, press and hold the Page/Answer button for 2 seconds to activate the doorstrike. The system will sound an acknowledgment beep. The control panel will trigger the programmed Command Output (1 - 8), which will activate the PGM output connected to the doorstrike.

To terminate communications with the doorbox station, press the Page/Answer button briefly.

3.7 Door Chime

If the Door Chime feature is enabled for zones on the system, when a zone is violated or restored, the keypads on the partition will beep.

If an Escort5580(TC) v3.0 is connected to the system, it will announce the label for the zone which generated the door chime over the audio stations (**NOTE:** This feature is only available with the PC5020/P-8+ v3.1 and higher).

3.8 Monitoring

The Monitor feature allows users to listen-in on one area at any other intercom station (except stations on DND). To listen-in on an area, go to the station in the area and press and hold the Do Not Disturb button for two seconds. The station will be put in Do Not Disturb mode and the Do Not Disturb light will flash. The PC5936 will transmit all sounds heard from that station to all the other stations on the system.

Other features such as paging, door answer and answering incoming calls can still be performed and will override the monitor feature. If a page, door answer or telephone call answer is in progress the monitor feature will not operate until the conversation is ended. To turn off the monitor feature press the Do Not Disturb button once. The red light on the station will stop flashing.

Only one station at a time can be monitored. To monitor another area, turn the monitor feature off on the first station.

Section 5: Programming Worksheets

For audio interface programming, enter Section[802] in Installer Programming.

Port Programming

Port Definitions

(00) Not used **(01) Doorbox 1** **(02) Doorbox 2**
(03) Intercom (Monitor) **(05) Music Input**

[01] **Port Definitions (Ports 1-7)**
See section 4.1 ‘Port Definitions’ page 12.
Default

01	___	Port 1 Definition
03	___	Port 2 Definition
03	___	Port 3 Definition
03	___	Port 4 Definition
03	___	Port 5 Definition
03	___	Port 6 Definition
03	___	Port 7 Definition

[02] **Port Definitions (Ports 8-15)**
See section 4.1 ‘Port Definitions’ page 12.
Default

01	___	Port 8 Definition
03	___	Port 9 Definition
03	___	Port 10 Definition
03	___	Port 11 Definition
03	___	Port 12 Definition
03	___	Port 13 Definition
03	___	Port 14 Definition
03	___	Port 15 Definition

[10] **Port Assignments (Zones 1-8)**
Enter the nearest intercom port number (01-15, 00=not used)
Default

00	___	Zone 1 Port Assignment
00	___	Zone 2 Port Assignment
00	___	Zone 3 Port Assignment
00	___	Zone 4 Port Assignment
00	___	Zone 5 Port Assignment
00	___	Zone 6 Port Assignment
00	___	Zone 7 Port Assignment
00	___	Zone 8 Port Assignment

NOTE: The 'Terminate Call' key should be used by the operator before hanging up during a talk/listen-in session. The alarm and talk/listen options will occur for events from any partition.

4.9 Telephone Ring Options

Ref: Section [60]

Ref: Section [61]

Each port/intercom station can be enabled or disabled for receiving incoming telephone rings on the speaker.

4.10 Music Broadcast Mask

Ref: Section [62] Port 1-7

Ref: Section [63] Port 8-15

Each port/intercom station can be enabled/disabled for sounding music. Music input needs to be programmed/enabled for this to work.

4.11 Port Function Key

Ref: Section [70] Port 1-7

Ref: Section [71] Port 8-15

Each port can be enabled or disabled for activating the doorstrike/function key option while a link is established between an exterior doorbox station and an interior intercom station.

4.12 Function Key

Ref: Section [72]

This section is used to program which PGM type will be activated when the doorstrike/function key feature is used.

3.9 Answering Incoming Calls

When an incoming call is detected, the PC5936 will sound a ringing tone on all stations which are enabled to sound the tone (unless on Do Not Disturb). To answer the call the user must press the Page/Answer button for 1 second. Once the call is answered the audio channel will operate the same as it does for a page.

The call will end if the user presses and holds the Page/Answer button for 1 second. The call will also end after 30 seconds of silence.

If a page is in progress when an incoming call is detected only the two users on the page will hear the ring. To answer the call either user can press and hold the Page/Answer button for 1 second. The page will end and the user will immediately be connected to the incoming call.

If a user has answered a telephone call at an intercom station and then the doorbell is pressed, the user will hear the doorbell. The user can press Page/Answer to hang up the telephone, and then press Page/Answer one more time to answer the doorbell.

3.10 Transferring and Holding Calls

Once a user has answered a call on an intercom station, they can:

- put the call on hold;
- transfer the call to an in-house telephone;
- page someone so that they can answer the call at another intercom station.

To put a call on hold press the Do Not Disturb button once. Once the call is on hold, you can page someone else to answer the call, or answer doorbells as usual.

To pick up a holding call at a telephone, go to the telephone, pick up the receiver and press the [#] key for 1 second. This puts the call through to the telephone and disconnects the intercom station from the conversation.

To pick up a holding call at any intercom station, press the Do Not Disturb button.

3.11 Call Waiting

If you have answered the telephone through an audio station and a second call comes in, the station will ring. To answer the second call while on line with the first call, press the Page/Answer button. This puts the first call on hold and answers the second call. To return to the first call press the Page/Answer button again.

3.12 User Help (Keypad Function Key)

If programmed, users can press the User Help function key at a keypad to broadcast Escort5580(TC) voice prompts through the nearest intercom station. For function key programming instructions, see your main control panel *Installation Manual*.

3.13 Music Input

The music input feature allows users to broadcast background music to all stations which are enabled for paging. The music input feature can be turned on or off using any keypad on the system.

For the music input to work, the incoming audio signal must be connected to a port which is programmed for music input. See 2.6 'Music Input Wiring' page 6 and 4.1 'Port Definitions' page 12 for more information.

To turn on the background music, enter user programming [*][6][Master Code] then press [9]. To turn off the music, enter [*][6][Master Code][9] again.

NOTE: The monitor and music input feature cannot be on at the same time. If both are turned on monitoring will take priority and the music will not be heard.

3.14 Alarm Follower

The audio stations will sound alarm conditions along with the bell output of the control panel. All stations will sound an alarm using Burglary and Fire type tones. All Burglary alarms will sound a steady alarm output. All Fire alarms will sound a pulsed alarm output.

3.15 Verbal Alarm Announcements

If you have installed an Escort5580TC v3.0 on the system, when zones go into alarm the Escort module will announce the labels for those zones over the intercom system. The alarm announcement will be as follows:

- an alarm tone;
- verbal announcement of the first zone in alarm;
- verbal announcement of the latest zone in alarm;
- series repeats until alarms are silenced.

NOTE: This feature is only available with the PC5020 v3.1 and higher.

[04] For Future Use

[05] For Future Use

[06] Low Gain Listen To All - this key activates LOW gain listen-in from the premises from all activated microphones.

[07] Extend Time - pressing this key extends the session by the time programmed in section [55].

[08] For Future Use

[09] Terminate Session - when pressed, this key will terminate the talk/listen-in session.

[10] For Future Use

[11] Cancel First Keypress - pressing this key will cancel the first entry of a 2-digit command (i.e. zone select).

[12] For Future Use

[13] Zone Select - this key requires a 2-digit zone number (01-64) entry after pressing the key. Once the zone number has been entered the port assigned to that zone is activated for listen-in. If the selected zone does not have a port programmed, the zone select function is cancelled (the module returns to the state it was in before the zone select function key was pressed).

[14] Increment Selected Microphone (Input) - if the operator does not hear anything initially, they can increment the selected port by pressing this key.

[15] Decrement Selected Microphone (Input) - if the operator does not hear anything initially, they can decrement the selected port by pressing this key.

[16] For Future Use

[17] Mode Key - this key allows the operator to toggle to an extended set of commands.

4.8 Listen-In Options

Ref: Section [50] -[57]

These toggles are used to enable/disable listen-in for the zone alarms.

Ref: Section [58]

These toggles are used to enable and disable the system events which will cause the panel to initiate talk/listen-in upon completion of the communication handshake. The following system events can be programmed to initiate talk/listen-in.

Zone Alarms	**N**	(Enable/disable by zone)
Tampers	**N**	
Openings/Closing	**N**	
[A] Alarm	**N**	
[P] Alarm	**N**	
Duress Alarm	**N**	
Zone Exp. Sup. Alarm	**N**	
Open After Alarm	**N**	

[04] Doorbell Listens to All (Default=OFF)

ON Handsfree doorbell. Enabling this feature allows all intercom ports to respond to a doorbell page without pressing the Page/Answer button to answer (excluding ports in DND or masked off in the General Broadcast Options). When a doorbell page is initiated, all other intercom stations can respond to a page without pressing the Page/Answer button. If the page is answered on another intercom station, general page activity will take place. If the page is not answered within 30 seconds, it will time out.

OFF Doorbell waits for answer. A page must be answered by pressing the Answer button to respond

[05] Bells Silenced During Verbal Alarm (Default=OFF)

NOTE: This feature is only available with PC5020 v3.1 and higher.

ON The bell will be turned off while annunciating a verbal alarm (only the main panel bell is silenced).

OFF The bell will continue to sound while annunciating a verbal alarm.

NOTE: This feature only affects the main panel bell.

[06] Audio Link Enabled (Default=OFF)

ON The audio link will be used instead of the phone line for audio help and verbal prompts.

OFF The phone line will be used for audio help and verbal prompts.

4.6 Audio Duration

Ref: Section [32] (Default=90)

This section allows programming of the length of time that the audio module will remain on-line with the receiver in talk/listen-in. The on-line time can be manually extended by the operator. Valid entries are 00-99 seconds.

4.7 Phone Key Options

Ref: Section [40]

Ref: Section [41]

Keys [0]-[9], [*] and [#] are programmable for control of the talk/listen-in communication by the central station operator. In addition, a mode key can be programmed to add 12 more keys (mode key + key).

The available options are as follows:

[00] Key Not Used - the key will not perform any function when pressed during an on-line session.

[01] Talk To All Speakers - this key activates high gain talk to the premises from all speakers.

[02] For Future Use

[03] High Gain Listen To All - this key activates high gain listen-in from the premises from all activated microphones.

3.16 Central Station Talk/Listen-in (Not Permitted on UL Listed Systems)

When a talk/listen-in event occurs the PC5936 will seize the telephone line, call the central station and initiate a talk/listen-in session. The PC5936 will start a 90-second session of low-gain listen-in on the station closest to the zone in alarm, or on all stations if the CS Listen All option is on (see 4.9 ‘Telephone Ring Options’ page 16). When the central station operator presses any key on the telephone a new 90-second session will begin.

If a Holdup, Panic or Duress alarm occurs, the operator will only be able to listen-in, as the speakers will not be turned on. See 4.9 ‘Telephone Ring Options’ page 16 for information on programming which events will trigger a talk/listen-in session.

Central station operators can control the talk/listen-in session using the keys on their Touch-Tone* telephone. You can program the functions of these keys by following the instructions in 4.7 ‘Phone Key Options’ page 14.

NOTE: Doorbells and monitoring will not work when talk/listen-in mode is on.

NOTE: If talk/listen-in is active and another event occurs, the PC5936 will end the talk/listen-in session and transmit the event to the central station.

*Touch-Tone is a trademark of Stentor Resource Centre Inc.

Section 4: Installer Programmable Features & Options

4.1 Port Definitions

Ref: Section [01], Port 1-7

Ref: Section [02], Port 8-15

Not Used (Disabled)

The port is not connected and is not used. A disabled port has the LED turned ON and does not produce any sound. It does not react to pushed buttons.

Doorbox 1

The port is connected to a speaker/microphone located at an entrance (e.g., front door) from which a page will result in a doorbell tone (dual tone) sounding on all interior intercom ports.

Doorbox 2

The port is connected to a speaker/microphone located at an alternate entrance (e.g., back /side door) from which a page will result in a different doorbell tone (single tone) sounding on all interior intercom ports.

Intercom (Monitor)

The port is connected to any interior speaker/microphone which can send or receive pages. This port definition also allows the port to be turned into a monitor station.

Music Input

This port definition allows the port to be turned into a hardwired music input source. When enabled through [*][6] or with a function key, the music input will be broadcast to all intercom ports enabled for music broadcast (sections 62 and 63).

4.2 Zone Assignment

Ref: Section [10], Zones 1-8

Ref: Section [11], Zones 9-16

Ref: Section [12], Zones 17-24

Ref: Section [13], Zones 25-32

Ref: Section [14], Zones 33-40

Ref: Section [15], Zones 41-48

Ref: Section [16], Zones 49-56

Ref: Section [17], Zones 57-64

Each zone on the system must be assigned to the nearest speaker/microphone intercom for central station talk/listen. Enter 01-15 for each zone.

4.3 Keypad Assignment

Ref: Section [18], Keypad 1-8

For use with the User Help function key; this section is used to program which audio port/intercom station has been physically placed beside a system keypad. Enter 01-15 for each keypad.

4.4 Broadcast Mask

Ref: Section [20], Port 1-8

Ref: Section [21], Port 9-15

Each port can be enabled or disabled for receiving incoming activity on the speaker. When paging to a port/station is disabled in this section, the DND light will come ON steady.

The following sounds are masked off when disabled in this section:

- Incoming pages
- Sound from the monitor station
- Doorbells

This section does not control the system alarm follower or telephone rings.

4.5 Audio Options

Ref: Section [30]

[01] Local Alarm Follower (Default=OFF)

ON Alarm tones (burg or fire) will sound through the intercom stations during bell activity.

OFF Alarm tones will not sound.

[02] Central Station Listen to All (Default=OFF)

ON Listen to all zones once on-line. When talk/listen-in is initiated, the central station will hear activity from all zones until specific zones are selected.

OFF Listen only to zones in alarm once on-line. When talk/listen-in is initiated, the central station will hear activity only from the zones in alarm until specific zones are selected.

[03] Page Listens to All (Default=OFF)

ON Enabling this feature allows all intercom ports to respond to a page without pressing the Page/Answer button to answer (excluding ports in DND or masked off in the General Broadcast options). When a page is initiated, all other intercom stations can respond to a page without pressing the Page/Answer button. If the page is answered on another intercom station, general page activity will take place. If the page is not answered within 30 seconds, it will time out.

OFF Page waits for answer. A page must be answered by pressing the Answer button to respond.