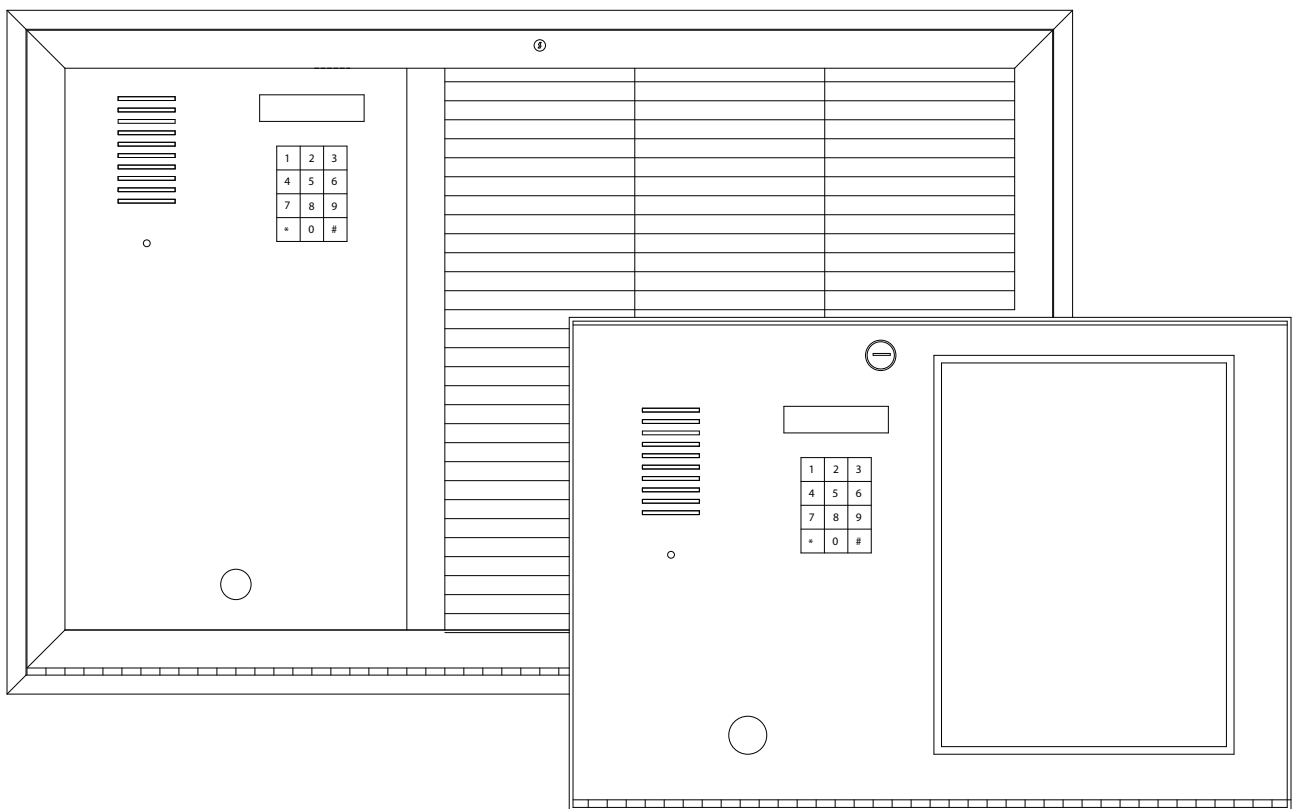


DOORGUARD[®] 200/2000

TELEPHONE AUTODIALERS

INSTALLATION & PROGRAMMING MANUAL



ES&P VENTURES CORP.

Engineering
Services &
Products

DOORGUARD[®] 200/2000 Series Autodialers

SYSTEM FEATURES

- ◆ *Capacity for up to 1000 Tenants.*
- ◆ *Simple Upgrade from Autodialer to No Telephone Line System.*
- ◆ *Handsfree or Handset operation.*
- ◆ *Field Programmability using system keypad.*
- ◆ *High Contrast LCD user Display.*
- ◆ *Zinc Die-cast Marine Quality Keypad.*
- ◆ *E²PROM Memory, retains programmed information during total power failure.*
- ◆ *Superior Lightning & Transient Protection.*
- ◆ *Two Programmable Relay outputs to control door strikes, gates, cameras, etc.*
- ◆ *System operates with both Tone and Pulse telephones.*
- ◆ *Variable Tenant Code length, 1, 2, 3, or 4 digits*
- ◆ *7, 10 and 11 Digit dialing capability.*
- ◆ *Built-in Multiple Entrance capability.*
- ◆ *Automatic termination of call after eight seconds of dial tone detection.*
- ◆ *Tone & Tapping Rejection Circuitry to prevent unauthorised entry.*
- ◆ *Provision for Postal Service Lock included.*
- ◆ *Contact Input will pulse entry doors during an emergency.*
- ◆ *Door Timer Cutoff input prevents 'tail-gating' through entry doors.*
- ◆ *Night Service Feature, transfers all calls to pre-programmed telephone number.*
- ◆ *One 'Keyless' Entry Code per tenant plus five for use by building management.*
- ◆ *Warning Tone to alert tenant call will end in 10 seconds.*
- ◆ *Tenant Codes can be actual suite numbers or may be coded for security purposes.*

Installation Manual for 200/2000 Series Telephone Autodialers

TABLE OF CONTENTS

	Page
1.0 Installation Hints	1
2.0 Special Features	1
2.1 Postal Service Lock	1
2.2 Door Timer Cut-Off	1
2.3 Auxiliary Relay Activation	2
2.4 Emergency Input	2
2.5 Multiple Entrances	2
2.6 Night Service	2
3.0 Installation	3
4.0 System Programming	4
4.1 Entering/Exiting "Program" Mode	4
4.2 Tenant Codes, Entry/Review/Delete	4
4.3 Keyless Entry Codes	5
4.4 System Master Code	6
4.5 7, 10, 11 Digit Select	6
4.6 Telephone Line Type Selection	6
4.7 Door Timer Selection	7
4.8 Conversation Time Selection	7
4.9 Night Service	7
4.10 Night Service Telephone	7
5.0 Adjustments	8
5.1 Volume Controls	8
5.2 Rotary Phone (Pulse) Sensitivity	8

Appendices

- A. Regulatory Approvals and System Warranty
- B. System Wiring Diagram
- C. Programming Worksheet
- D. Directory Worksheets
- E. User Instruction Sheet
- F.
- G. Wiegand Card Access Interface

DOORGUARD[®] 200/2000 Series Autodialers

1.0 INSTALLATION HINTS

- ◆ Arrangements should be made with the telephone company for the installation of a telephone line for use by the system. It is recommended that the telephone jack be installed inside the entry panel enclosure.
- ◆ One 16 Volt/20 VA CSA approved Class 2 power transformer is required for system operation. A second transformer is required for door strike activation. This transformer should have the necessary voltage and current rating for the door strike that is to be used. Do not exceed the maximum relay rating of 3 amps @ 28VDC.
- ◆ Transformers and remote devices such as the door strike, emergency and door contacts, must be wired to the system controller located in the enclosure housing. A wiring channel must be provided for these devices to the rear of the system enclosure. Follow local building code requirements for low voltage wiring.
- ◆ If a Postal Service Lock is to be installed, arrangements must be made with Post-Office to have the lock supplied.
- ◆ In Multiple Entrance applications, two additional wires are required from each entry system to interconnect the system controllers. A telephone line extension jack must also be installed at each entry location (see system wiring diagram).

2.0 SPECIAL FEATURES

2.1 Postal Service Lock

Provision for the installation of a Postal Service Lock is available on the rear of the control panel of the system enclosure. The system is pre-wired for this service.

2.2 Door Timer Cut-Off

Using this feature of the entry system will require the installation of a Normally Open switch contact that closes when the entry door has been opened. A magnetic contact, as used in security systems is acceptable for this application provided that a Normally Open type is obtained.

When the electric door strike is released, the door will normally remain open for the period of time that has been programmed (see Door Timer Selection, Sec.4.7). When the door timer cut-off feature is used, the door strike will de-energize as soon as the system senses that the entry door has been opened. This will cause the door to lock when it closes regardless of the programmed time. This action will allow the door strike to be energised only as long as necessary and will prevent unauthorised entry of individuals who follow behind the visitor (tailgating).

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2.0 SPECIAL FEATURES (cont.)

2.3 Auxiliary Relay Activation

The system includes a Form C auxiliary relay contact that can be momentarily activated from the suite telephone by dialing the digit 6 when the tenant is in conversation with the visitor at the entry system. This contact can be used to trigger a parking gate, elevator, secondary door or video camera.

2.4 Emergency Input

Connection of a Normally Open alarm contact will cause the electric door strike to pulse on and off in the event of an emergency situation. This will effectively leave the entry door unlocked for the duration of the emergency.

2.5 Multiple Entrances

Accommodation of multiple entry doors is a built-in feature of the DoorGuard System. Up to 20 entry systems can be interconnected without the need for additional switching equipment, and all systems can be connected to one common telephone line. One additional pair of wires, parallel connected, to terminals ME and G of all entry systems will be required. When one entry panel is in use, the other panels will be temporarily disabled and display a "System in Use" message. Note that each entry panel must be independently powered and programmed, and requires a telephone extension jack at that location.

2.6 Night Service

When enabled, the Night Service feature can be used to redirect all entry system calls to a pre-designated telephone number (Guard Phone). When in use (by entering * 4 5 6), the entry system will display the "Night Service On" message. To return to normal, re-enter * 4 5 6.

DOORGUARD[®] 200/2000 Series Autodialers

3.0 INSTALLATION - Refer to SYSTEM WIRING DIAGRAM (Appendix B)

1. Mount the system enclosure to the wall in a location close to the building's controlled entry point.
2. Connect the door strike wires to terminals D1 and D2 for D.C. (silent) operation or to terminals D3 and D4 for A.C. (buzzing) operation. Do not exceed maximum switched door strike load of 28 volts at 3 Amps.
3. An auxiliary switched device may be controlled through the auxiliary relay contact that is available by connecting to terminals N.C.(normally closed), C (common) and N.O.(normally open).The maximum switched auxiliary load is 28 volts at 3 amps. This contact will change state for one second, when energized by the tenant dialing the digit 6 from their suite telephone. (Tone type phones only).
4. Terminal PL is for the postal service lock. Closing of a normally open switch between terminals PL and G is required for activation. Remove the panel plug button for the Postman's key and mount the lock with the supplied hardware. Adjust the switch actuator for proper operation with the lock. Attach wires from switch to terminals PL & G on controller.
5. Terminal TC is for connection of a door timer cut-off contact. A normally open contact that closes when the door has been opened will cut-off the door timer and instantly re-lock the door. This is used to prevent "tail-gating" of unwanted visitors through the entry doors. Connect between terminals TC and G.
6. Terminal FA is for connection to the building emergency contact. A normally open contact that closes during an alarm condition can be connected between terminals FA and G to pulse open the entry door during an emergency situation.
7. Terminal ME is the interconnect point for multiple entrance systems. Terminals ME and G of all entry systems must be interconnected from each entry system to allow operation with a common telephone line. Each location must also be wired with its own transformer, door strike, extension telephone jack, switch contacts, etc. as shown on the wiring diagram. Each location must be separately programmed.
8. Connect door strike transformer to terminals T3 and T4. Note that the maximum door strike load that may switched through the controller is 28 volts at 3 amps.
9. At this time all wiring should be checked for shorts and opens. Connect 16 VAC from system transformer to terminals T1 and T2 on system controller terminal block. This transformer must not be used to power any other devices such as the door strike. The display should now be illuminated and the message " Welcome, Dial Code Number " will appear. Telephone Line may now be connected.

4.0 SYSTEM PROGRAMMING

All programming of the entry system is accomplished through the use of the system keypad and the display located on the control panel. Use the supplied Directory Worksheets to generate a record of the building occupants, their suite telephone numbers, assigned dial codes and keyless entry codes. These sheets will be required for programming and in the event that changes are to be made.

Complete the Programming Worksheet that has been provided and ensure that this and the directory worksheets are given to building management when installation and programming is completed.

4.1 Program Mode Entry / Exit

Enter the three digit System Master Code (default is * 1 2 3) to commence a programming session. Use the '1' key on the keypad to scroll up the programming menu or the '3' key to scroll down to the necessary function. When the necessary function is displayed on the screen, press the '#' key to select. Follow the displayed instructions to make the necessary changes. When programming is complete, exit program mode by pressing the '*' key twice.

4.2 Tenant Codes Entry / Review / Delete

Tenant Code Entry

Press '#' key to select this function when the program menu displays "TO PROGRAM CODES, PRESS #". This function allows the entry of the tenant codes and telephone numbers. Enter the four digit tenant code followed by the tenant telephone number (7, 10 or 11 digit telephone numbers can be accommodated, see section 4.5). Press the '#' key to store the numbers. Continue in this fashion until all codes and telephone numbers are stored. If the tenant codes are less than four digits in length, enter zeroes as leading digits in the code, they will be ignored by the system during actual use but are required for programming. If an error is made while entering a code or a telephone number, press the '*' key to backspace.

Press the '*' key when finished to exit this mode and return to the programming menu.
Press the '*' key to exit the program mode if desired.

Tenant Code Review and Delete

Press the '#' key to select this function when the program menu displays "VIEW TENANT CODES". The message "CODE TO REVIEW, _____" will appear. Enter the four digit code to be reviewed. The code and associated telephone number will then appear on the display. If the code and telephone number are to be deleted, press the '#' key while they are being displayed. From this point is also possible to display all tenant codes and telephone numbers by using the '1' and '3' keys to scroll through the memory.

Press the '*' key when finished to exit this mode and return to the programming menu.
Press the '*' key to exit the program mode if desired.

4.3 Keyless Entry Codes - Entry / Review / Delete

Entry of Keyless Entry Codes

Keyless Entry Codes allow entry through the controlled doors by the use of a four digit code from the system keypad. This code must be preceded by the '#' key during actual use so that the code is not seen on the display.

Press the '#' key to select this function when the programming menu displays "ENTER KEYLESS CODES". The message "KEYLESS ENTRY, CODE # _____" will appear so that codes may be entered. Use the '#' key to store the code.

Press the '*' key when finished to exit this mode and return to the programming menu.
Press the '*' key to exit the program mode if desired.

Keyless Entry Code Review and Delete

This section allows the review and/or deletion of keyless entry codes. Press the '#' key to select this function when the programming menu displays the message "VIEW KEYLESS CODES". The message "CODE TO REVIEW _____" will appear. Enter the code to be reviewed. Use the '1' and '3' keys to scroll through the memory and view the assigned codes. If a code is to be deleted, press the '#' key while the particular code is being displayed.

Press the '*' key when finished to exit this mode and return to the programming menu.
Press the '*' key to exit the program mode if desired.

DOORGUARD[®] 200/2000 Series Autodialers

4.4 System Master Code

The Master Code is used to allow access to the "Program Mode". When the entry system is shipped from the factory, its master code is set to * 1 2 3 . It is recommended that the master code be reprogrammed and the new code be inserted in the appropriate place on the Programming Worksheet (Appendix C). This code is only to be used when programming is necessary by the installation company or by authorised personnel.

The Master Code can be reset to * 1 2 3 by shorting the pins marked "Reset Master Code" on the system controller with a key or small screwdriver while power is on. This will not alter any other programmed information.

Press the '#' key to select this function when the programming menu displays the message "NEW MASTER CODE". The message "MASTER CODE * 1 2 3" will appear. Enter a new 3 digit master code and then press the '#' to store. The new master code will now be required to access the programmable functions.

Press the '*' key when finished to exit this mode and return to the programming menu.
Press the '*' key to exit the program mode if desired.

4.5 7, 10 or 11 Digit Dialing

DoorGuard Autodialers allow for dialing of 7, 10 and 11 digit tenant telephone numbers. From the menu, press the '#' key to select the number of digits required. Different length numbers can be intermixed by using this section as required.

Press the '*' key when finished to exit this mode and return to the programming menu.
Press the '*' key to exit the program mode if desired.

4.6 Telephone Line Type Selection

This section will select the type of dialling the system controller will use, DTMF or Pulse (factory default is DTMF). The setting must correspond with the type of telephone line that has been installed for the entry system.

Press the '#' key to select this function when the programming menu displays the message "PULSE OR TONE OPTION". The message "PULSE OR TONE" will appear on the display. Enter '0 0' for Pulse (Rotary) or '1 1' for Tone (DTMF) type dialling.

Press the '*' key when finished to exit this mode and return to the programming menu.
Press the '*' key to exit the program mode if desired.

DOORGUARD[®] 200/2000 Series Autodialers

4.7 Door Timer Selection

The door open time can be selected to be from 0 to 99 seconds, (factory default is 10 seconds). Press the '#' key to select this function when the programming menu displays the message "DOOR TIME". The message "DOOR OPEN TIME" will appear. Enter a two digit time in seconds and press the '#' key to store.

Press the '*' key when finished to exit this mode and return to the programming menu.
Press the '*' key to exit the program mode if desired.

4.8 Conversation Time Selection

This function allows the setting of the conversation time between the visitor and tenant from 0 to 99 seconds, (factory default is 60 seconds). Press the '#' key to select when the programming menu displays the message "TALK TIME". The message "TALK TIME" will appear. Enter a two digit time in seconds and press the '#' key to store.

Press the '*' key when finished to exit this mode and return to the programming menu.
Press the '*' key to exit the program mode if desired.

4.9 Night Service

This section will allow enabling or disabling of the Night Service Feature.
See Sections 2.6 and 4.10.

Press the '#' key to select when the programming menu displays the message "NIGHT SERVICE?". The message "ENABLE / DISABLE" will appear. Enter "0 0" to enable the function or "1 1" to disable. Press the '#' key to store.

Press the '*' key when finished to exit this mode and return to the programming menu.
Press the '*' key to exit the program mode if desired.

4.10 Night Service Telephone

This section allows the programming of the Night Service telephone number when this feature is enabled. Press the '#' key when the menu displays the message "Program Guard Phone". Enter the telephone number where all calls are to be directed when Night Service is enabled.

Press the '*' key when finished to exit this mode and return to the programming menu.
Press the '*' key to exit the program mode if desired.

5.0 ADJUSTMENTS

5.1 Volume Control

The communication volume levels come factory preset for normal operation. The levels can be increased or decreased by adjusting the potentiometers located along the bottom of the system controller located behind the front display plate. Audio level from the entry system to the suite is controlled by the MIC. VOLUME control and the level from the suite to the entry system by the SPEAKER VOLUME control.

5.2 Rotary Phone Pulse Sensitivity

The telephone companies do not specify or guarantee the waveshape of the signal transmitted when the tenant dials the digit 9 from a rotary (pulse) telephone. In order to achieve best results, the DoorGuard System is furnished with a sensitivity adjustment potentiometer as well as an indicator lamp to view the incoming rotary signal (pulses).

This potentiometer is labelled "PULSE SENSITIVITY" on the system controller. The system sensitivity is factory preset to allow a wide range of incoming rotary signals to properly trigger the door circuit and usually will not require any adjustment. If Pulse telephones are not being used, set the sensitivity adjustment to minimum. If adjustment is necessary because the door strike cannot be properly triggered, use the following procedure.

1. Set the "PULSE SENSITIVITY" control to mid position.
2. Call the suite telephone that does not properly trigger the door circuit from the entry system.
3. Observe the "PULSE INDICATOR" while the digit 9 is being dialled from the suite telephone. The indicator should flash distinctly every time a pulse is heard.
4. If the indicator barely comes on, the sensitivity is set too low. Increase the sensitivity by turning the shaft of the potentiometer clockwise 1/8th of a turn at a time until the indicator shows distinct flashing and best results are obtained.
5. If the indicator is on steadily, the sensitivity is set too high and the door circuit may false trigger. Turn the shaft of the potentiometer counter-clockwise to decrease the sensitivity. The sensitivity may also require reduction if the phone line is particularly loud or noisy.
6. NOTE: Sensitivity adjustments are not required when using tone (DTMF) type suite telephones.

DOORGUARD[®] 200/2000 Series Autodialers

APPENDIX A REGULATORY APPROVALS

IMPORTANT NOTICE

The following information is provided to the installation contractor for compliance with Industry Canada Standards.

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 that 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.

Users 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 sum of the Load Numbers of all devices does not exceed 100.

The Load Number for this Equipment is 4.0
Industry Canada Certification No.: 1949 5264 A

SYSTEM WARRANTY

Equipment manufactured by ES&P is warranted to be free of defects in material and workmanship for a period of one (1) year from the original shipment date. ES&P will, at its option, repair or replace any equipment which it determines to be defective in material or workmanship. Equipment thought to be defective is to be shipped freight prepaid to ES&P, ES&P will prepay return freight. ES&P shall not be responsible to repair or replace equipment which has been abused, incorrectly installed, repaired by others, altered or otherwise misused or damaged in any way. Unless previously contracted by ES&P, ES&P will not assume responsibility for determining the defective or operative status at the point of installation, and will not assume liability beyond the repair or replacement of the product at our factory or authorized service centre.

DOORGUARD[®] 200/2000 Series Autodialers

INSTRUCTION TO THE U.S. USER FCC REQUIRED INFORMATION

FCC REGULATIONS

This device has been granted a registration number by the FCC, under part 68 rules and regulations governing devices that directly connect to the telephone lines. This equipment complies with Part 68 of the FCC rules. A label on the controller housing of the DoorGuard 2000 contains, among other information, the FCC Registration Number and Ringer Equivalence Number (REN) for this equipment. You must, upon request, provide this information to your telephone company.

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 REN's 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 telephone company to determine the maximum REN for your calling area.

This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subject to state tariffs.

Should the DoorGuard 2000 cause harm to the telephone network, the telephone company may discontinue your service temporarily. If possible, they will notify you in advance. But if advanced notice is not practical, you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC. The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

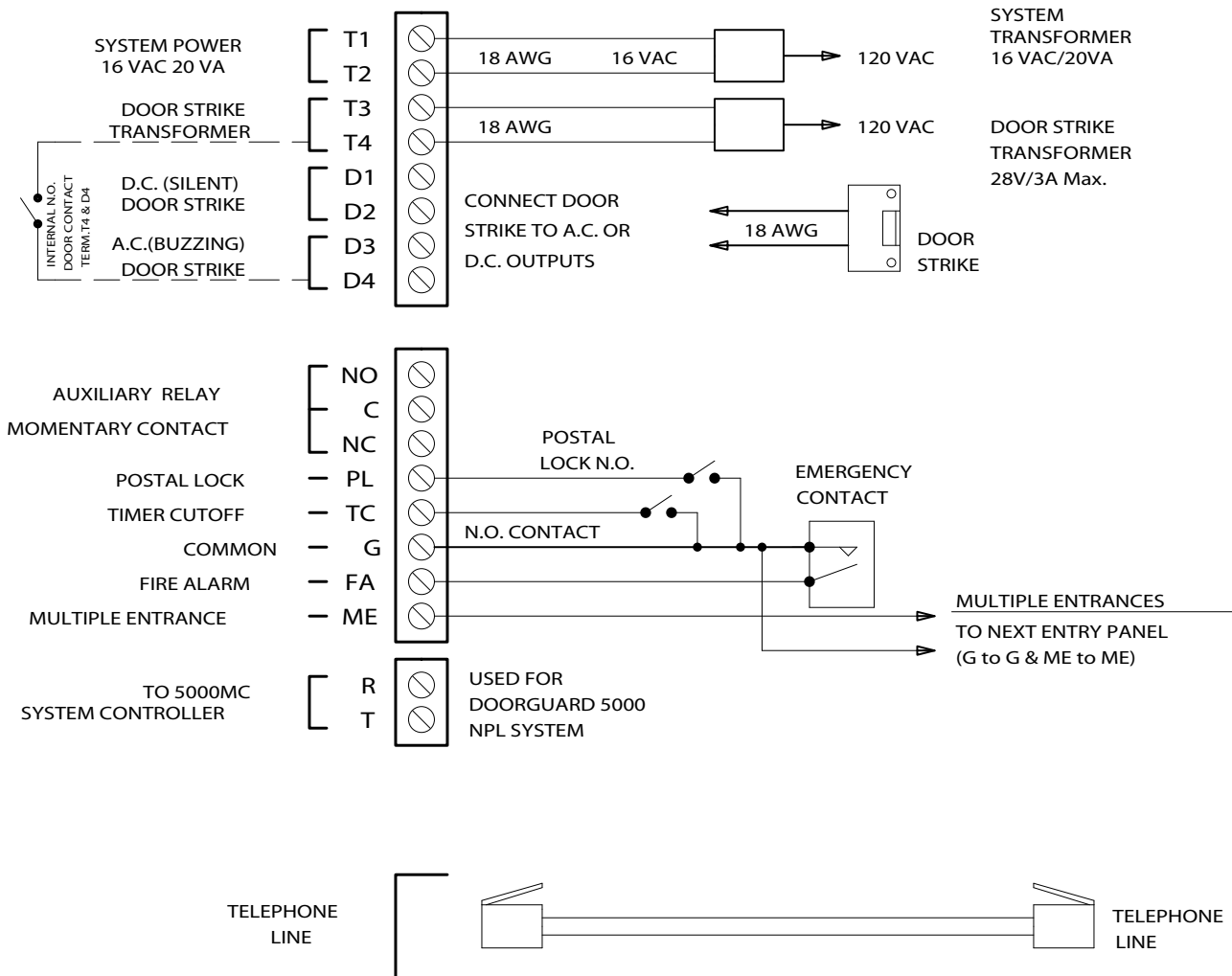
If you experience trouble with this equipment, please contact:

E S & P Ventures Corporation
1 Bradwick Drive, Unit 8
Concord, Ontario, Canada L4K 2T4
Tel. (905) 738-6855 Fax. (905) 738-8116

for information to obtain 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 the equipment is not malfunctioning.

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APPENDIX B SYSTEM WIRING DIAGRAM



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APPENDIX C

PROGRAMMING WORKSHEET

Installing Dealer: _____ Tel. _____

Building Address: _____

Installation Date: _____ System Tel. Line # : _____

Programming Instructions:

- A. Enter System Master Code from keypad to access the programming menu.
- B. Use the '1' and '3' digits on the keypad to scroll the menu screen.
- C. Follow the displayed instructions to make the necessary changes.
- D. Exit the programming mode by pressing the '*' key twice.

Programmed:

1. System Master Code * ___ ___ (Factory default = *123)
2. Door Open Time: ___ ___ sec. (Factory default = 10 sec.)
3. Conversation Time: ___ ___ sec. (Factory default = 60 sec.)
4. Night Service Tel. #: _____

USER OPERATING INSTRUCTIONS

A DoorGuard Intercom System has been installed in your building to provide increased security for you and your visitors. The system provides communication and entry control using your telephone.

Visitors simply enter your code number from the directory to ring your suite. You can answer from any telephone.

To permit entry, dial the digit "9".

To deny entry, simply hang-up. Do not dial "9".

USER OPERATING INSTRUCTIONS

A DoorGuard Intercom System has been installed in your building to provide increased security for you and your visitors. The system provides communication and entry control using your telephone.

Visitors simply enter your code number from the directory to ring your suite. You can answer from any telephone.

To permit entry, dial the digit "9".

To deny entry, simply hang-up. Do not dial "9".

Appendix G

26 BIT WIEGAND OPTION (CARD ACCESS INTERFACE)

The Entry System (Autodialer or NPL Lobby) includes the 26 bit Wiegand option:

1. Wiring: The interface requires a 3 wire connection (wiegand standard) between the Entry System located in the building entrance and the Card Access System.

Data 0 (Green) – marked as D0 (on Autodialer controller label)

Data 1 (White) – marked as D1.

Ground (Black) – marked as G.

2. The output voltage is 5 V.
3. Operation: The Wiegand module will transmit to the Card Access System in a similar way as a Card Reader. The transmission will occur only if access was granted by the resident. Therefore, only the Card Access System should control the door entry. The Entry System door control interface need not be used.

The resident code which will be transmitted to the Card Access System is the Directory Code which was programmed for the particular resident in the Entry System.

Additionally, if the postal lock is activated, the code 10000 will be transmitted.