Pi HSC505 and Pi HSC505R
Home Security Controller

User's Information Guide
R1A

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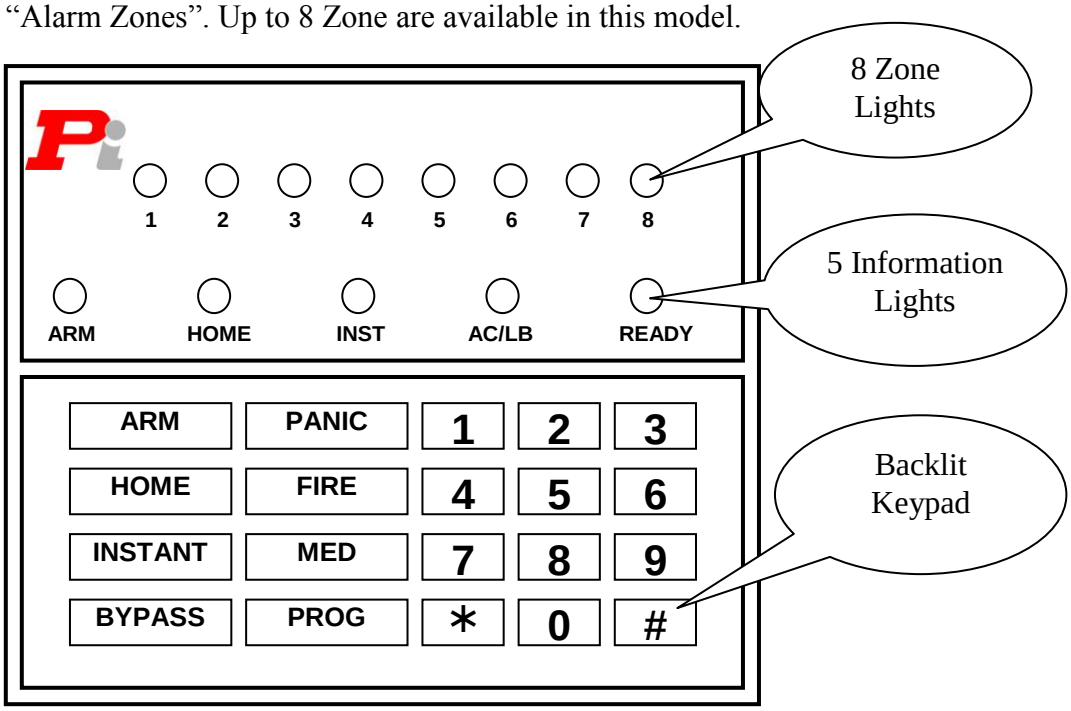
Introduction

Convention used in this guide
[ ] = Buttons
( ) = Lights
The Pi Home Security Controller model HSC505 forms a complete solution to your security monitoring needs.
Your Security company will have installed and setup your HSC505 to monitor various "Alarm Zones". Up to 8 Zone are available in this model.



Information LED lights

(ARM)	=	On when the system is armed
(HOME)	=	On when the system is armed in the "Home" mode
(INST)	=	On when the system is armed in the "Instant" mode
(AC/LB)	=	On when there is power on the system. Flashing if the battery voltage is low
(READY)	=	On when the system is disarmed and no zones are triggered. Flashing when in program mode
(ARM) **(HOME)** **(INST)** **(AC/LB)** **(READY)**	=	All flashing fast, battery voltage is critically low, the alarm will not operate in this condition and a service is required. See section "Battery Condition"

Keys

[ARM]	=	Used to arm the system
[HOME]	=	Used to arm the system in the home mode. Also used to cancel programming mode
[INSTANT]	=	Arms the system with no Entry or Exit delay time
[BYPASS]	=	Used to set or clear zone bypassing
[PANIC]	=	Activates an immediate Panic alarm and siren when pressed for 2 seconds
[FIRE]	=	Activates an immediate Fire alarm and "fire" siren when pressed for 2 seconds
[MED]	=	Activates an immediate Medical Alarm call when pressed for 2 seconds
[#][∗][0-9]	=	Used to enter data and information, see the following paragraphs

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Tamper and error conditions

Zone led and **Arm** led fast flash = **Alarm condition**
Zone led and **Arm** led and **Instant** led fast flash = **Zone tamper condition**.
Arm led and **Instant** led and **Ready** led fast flash = **Siren tamper**
Arm led and **Home** led and **Ready** led fast flash = **Panic input triggered**
Arm led and **Instant** led = **Tamper input triggered**
AC/LB led slow flash = **Low battery condition**
AC/LB led fast flash = **Battery fail condition**
Home led fast flash = **Telephone line fail**
Home led slow flash = **Communication failure**
Instant led slow flash = **Remote Tx no acknowledge**

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Quick mode.

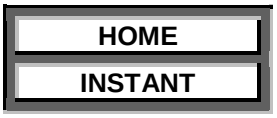
This mode is normally used by homeowners and allows quick arming and zone bypassing. User codes are still required to disarm the system. The HSC505 allows for 12 user codes, 1 arm only code, 1 door strike code and 1 duress code.
NOTE: The Installing Security Company must have enable quick mode otherwise refer to "Normal mode" for details on using your Home Security Controller.

Arm & Away (Quick)

Press for 2 seconds and release

Arming the system when no one will remain in the premises is called "Arm & Away". Make sure that the **(READY)** light is on and that all the **(Zone)** light's are off. Now press the **[ARM]** key. The **(READY)** light will go off and the **(ARM)** light will start to flash. While the **(ARM)** light is flashing the "Exit" delay timer is running. This allows you time to exit the premises. Once the "Exit" timer is complete the **(ARM)** light will stop flashing and remain on, the system is now fully armed.

Arm & Home (Quick)



Press for 2 seconds and release

Optional - press only if you wish to cancel Entry/Exit delay

Arming the system when people will remain in the premises, but confined to the "Home" zones is called "Arm & Home". Home zones are setup by the installing company and these zones will not arm in this mode. Make sure that the **(READY)** light is on and that all the **(Zone)** light's are off. Now press the **[HOME]** key. The **(READY)** light will go off, the **(HOME)** light will go on and the **(ARM)** light will start to flash. While the **(ARM)** light is flashing the "Exit" delay timer is running. Once the "Exit" timer is complete the **(ARM)** light will stop flashing and remain on, the system is now armed in the "HOME" mode. Pressing the **[INSTANT]** key after you have pressed the **[HOME]** will arm the system immediately and cancel any Entry/Exit delay. Do not set this if you are expecting someone to arrive later.

Welcome mode (Quick)

Press for 2 seconds and release

Once the system is armed in the "HOME" mode you can allow someone to enter your "Home" area via the armed entry/exit zones by pressing the **[HOME]** key the **(ARM)** light will start to flash for 2 minutes while the delay is on. This function starts a 2-minute entry delay to allow the person to come in, after which the system will automatically rearm in the "HOME" mode.

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Instant mode (Quick)

INSTANT Press for 2 seconds and release after arming the system

After arming the system in the "HOME" mode you can press the **[INSTANT]** key to remove the "Entry/Exit" time delay and arm the system immediately. The **(READY)** light is off; the **(INST)** light and **(ARM)** light are on. Setting the "INSTANT" mode will also disable any "Entry" delay and therefore the system will alarm as soon as any non-home zone is violated.
NOTE: if you are expecting someone to enter after the system is armed you should not set the "INSTANT" mode. The "INSTANT" mode can be switched on or off when the system is armed by simply pressing the **[INSTANT]** key:-
(INST) light off = Entry/Exit timed delay on
(INST) light on = Entry/Exit timed delay off

Bypassing a zone (Quick)

BYPASS Press for 2 seconds and release
Zone Number Entry the zone number you wish to bypass

If a zone has a fault (shown by the Zone light being on continually) you will be unable to arm the system. This zone will have to be bypassed before you can arm the system. Press the **[BYPASS]** key followed by the zone number e.g. **[4]** the zone light will now flash showing that it is bypassed. You may now proceed to arm the system as before.
If you accidentally bypass the wrong zone just press the **[BYPASS]** key followed by the zone number to un-bypass the zone again, the zone light will go off.
NOTE: some zones may not allow bypassing in which case you must contact your alarm company to repair the fault.

Disarm the system (Quick)

4 Digit User Code Enter your 4 digit user code

To disarm the system you must enter the user's four-digit code e.g. **[1][2][3][4]** the **(READY)** light will turn on and the **(ARM)** light will turn off. If the **(INST)** light and/or the **(HOME)** light were on these will also turn off when you disarm the system.
NOTE: the system will also arm in the "Arm & Away" mode if the user code is entered in the disarmed state.

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Normal Mode.

This mode of operation is normally used by businesses where there are a number of personnel that arm or disarm the system. Any operation requires a "User Code" to be entered. The HSC505 allows for 12 user codes, 1 arm only code, 1 door strike code and 1 duress code.

Arm & Away (Normal)

ARM	Press for 2 seconds and release
4 Digit User Code	Enter your 4 digit user code

Arming the system when no one will remain in the premises is called "Arm & Away". Make sure that the **(READY)** light is on and that all the **(Zone)** light's are off. Now press the **[ARM]** key and enter your 4-digit user code **[1][2][3][4]**. The **(READY)** light will go off and the (ARM) light will start to flash. While the **(ARM)** light is flashing the "Exit" delay timer is running. This allows you time to exit the premises. Once the "Exit" timer is complete the **(ARM)** light will stop flashing and remain on, the system is now fully armed.

Arm & Home (Normal)

HOME	Press for 2 seconds and release
4 Digit User Code	Enter your 4 digit user code
INSTANT	Optional - press only if you wish to cancel Entry/Exit delay

Arming the system when people will remain in the premises, but confined to the "Home" zones is called "Arm & Home". Home zones are setup by the installing company and these zones will not arm in this mode. Make sure that the **(READY)** light is on and that all the **(Zone)** light's are off. Now press the **[HOME]** key and enter your 4-digit user code **[1][2][3][4]**. The **(READY)** light will go off, the **(HOME)** light will go on and the **(ARM)** light will start to flash. While the **(ARM)** light is flashing the "Exit" delay timer is running. Once the "Exit" timer is complete the **(ARM)** light will stop flashing and remain on, the system is now armed in the "HOME" mode. Pressing the **[INSTANT]** key after you have entered your "User Code" will arm the system immediately and cancel any Entry/Exit delay. Do not set this if you are expecting someone to arrive later.

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Welcome mode (Normal)

Press for 2 seconds and release

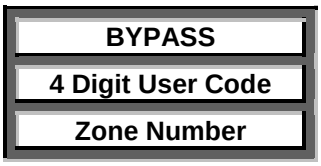
Once the system is armed in the "HOME" mode you can allow someone to enter your "Home" area via the armed entry/exit zones by pressing the **[HOME]** key. The **(ARM)** light will start flashing for 2 minutes while the delay is on. This 2-minute entry delay will allow a person to come in, after which the system will automatically rearm in the "HOME" mode.

Instant mode (Normal)

Press for 2 seconds and release

After arming the system in the "HOME" mode you can press the **[INSTANT]** key to remove the "Entry/Exit" time delay and arm's the system immediately. The **(READY)** light is off; the **(INST)** light and **(ARM)** light are on. Setting the "INSTANT" mode will also disable any "Entry" delay and therefore the system will alarm as soon as any non-home zone is violated.
NOTE: if you are expecting someone to enter after the system is armed you should not set the "INSTANT" mode. The "INSTANT" mode can be switched on or off when the system is armed by simply pressing the **[INSTANT]** key:-
(INST) light off = Entry/Exit timed delay on
(INST) light on = Entry/Exit timed delay off

Bypassing a zone (Normal)



Press for 2 seconds and release
Enter your 4 digit user code
Enter the zone number to bypass

If a zone has a fault (shown by the Zone light being on continually) you will be unable to arm the system. This zone will have to be bypassed before you can arm the system. Press the **[BYPASS]** key and enter your 4 digit user code **[1][2][3][4]** followed by the zone number e.g. **[4]** the zone light will now flash showing that it is bypassed. You may now proceed to arm the system as before.
If you accidentally bypass the wrong zone just press the **[BYPASS]** key and enter your 4 digit user code **[1][2][3][4]** followed by the zone number to un-bypass the zone again, the zone light will go off.
NOTE: some zones may not allow bypassing in which case you must contact your alarm company to repair the fault.

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Disarm the system (Normal)

4 Digit User Code	Enter your 4 digit user code

To disarm the system you must enter the user's four-digit code e.g. **[1][2][3][4]** the **(READY)** light will turn on and the **(ARM)** light will turn off. If the **(INST)** light and/or the **(HOME)** light were on these will also turn off when you disarm the system.

Chime Zones

If the installer has enabled "Chime Zones" your keypad buzzer will beep each time the chime zone is violated. This only occurs when the system is disarmed.
You can disable/enable the keypad buzzer by pressing the following keys

Normal mode

BYPASS	Press for 2 seconds and release
4 Digit User Code	Enter your 4 digit user code
∗ or #	Press the [*] key to enable, the [#] to disable

Quick mode

BYPASS	Press for 2 seconds and release
∗ or #	Press the [*] key to enable, the [#] to disable

Zone violation and monitoring

When the system is armed and a violation of a zone occurs you will see on the keypad that the violated zone's light and the **(ARM)** light will be flashing at a fast rate, the keypads buzzer will also be beeping at a fast rate. After disarming the system by entering your user code the violated zone's light and the **(READY)** light will be flashing at a fast rate, and buzzer will be silent. This state allows one to check or report the violated zones to your alarm monitoring company.
Clear this monitor mode by entering your user code a 2nd time all zones will clear and the **(READY)** light will be on.
If the (**ARM**)(**HOME**)(**INST**)(**AC/LB**)(**READY**) leds are all flashing see "Battery Condition" paragraph below.

Duress code entry

4-Digit Duress	Enter your 4-digit Duress Code

The system will be disarmed and will silently send a "Duress" alarm to your Alarm monitoring company who should react accordingly. The duress code is a 4-digit code that appears, to a potential attacker, to disarm the system. The code will also arm the system as well as send a "Duress" alarm

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Arming and disarming your system using a Wireless Remote Key

If your HSC505 has been fitted with a wireless Remote Key option you can arm and disarm the system by pressing the Remote Key button assigned to this function. The following siren indications are used.

- The siren will beep once to indicate that the system has armed.
- The siren will beep twice to indicate that the system has disarmed.
- If **no** siren is heard when trying to arm the system it means that one of the zones is not ready and the system cannot be armed.
- If the siren beeps three times when disarming the system this indicates that there has been a zone violation – **proceed with caution or contact your reaction force**.

Using the [#] key

Press and release

The **[#]** key may have been setup by your installer to open a gate, door or reset a smoke detector etc. Please check with your installing company on the detail of this operation.

Using a 4 digit [1][2][3][4] Control code

Enter your 4-digit Control Code

A four-digit Control code may have been setup by your installer to open a gate, door or reset a smoke detector etc. Please check with your installing company on the detail of this operation.

Battery Condition.

When the (**AC/LB**) led is flashing the battery voltage is lower than expected. This may be due to a mains fail condition, faulty charge or battery. If the mains has failed the condition will restore once the mains returns and the battery has had time to re-charge. If the condition does not change it is best to call for a service.
If the (**ARM**)(**HOME**)(**INST**)(**AC/LB**)(**READY**) leds are all flashing then the battery has reached a critically low voltage and the alarm cannot operate correctly. The keypad buzzer will sound when this condition occurs, pressing any key will stop the sound.
Check this condition by entering your 4-digit code at least twice, if no change occurs the alarm system will need servicing.
NOTE: the alarm will not function under the above condition.

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If the alarm was armed before this critical battery condition occurred, you would be warned to this fact by the flashing leds. If zones were violated before the critical condition they will be flashing, provided that the battery voltage did not go below 6 volts. In either case **proceed with caution or contact your reaction force**.

Enter you code twice to clear the condition, if it does not clear call for a service as soon as possible.

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User Programming Options

Setting and changing User Codes

The HSC505 has 12 user codes that can be used to set the various modes. The first of these codes is the master code and is the only code that will allow you access to the programming options.
To change user codes press and hold the **[PROG]** key until the "beep" is heard, then enter the "Master User Code" **[1][2][3][4]** the **(READY)** light will start flashing. Now enter the 2 digit users index number **[0][4]** followed by the new 4 digit code for user 04 e.g. **[1][0][2][9]** the **(READY)** light will stop flashing and remain on.
Repeat the above sequence to change other codes.

User Index 01 = Master User code
User Index 02 = User code
User Index 03 = User code
User Index 04 = User code
User Index 05 = User code
User Index 06 = User code
User Index 07 = User code
User Index 08 = User code
User Index 09 = User code
User Index 10 = User code
User Index 11 = User code
User Index 12 = User code
User Index 13 = Arm Only code
User Index 14 = Door Strike code
User Index 15 = Duress code

You can remove a code by pressing and holding the **[PROG]** key until the "beep" is heard, then enter the "Master User Code" **[1][2][3][4]** the **(READY)** light will start flashing. Now enter the 2-digit users index number for the code you want to remove e.g. **[0][4]** followed by the **[#]** key. The **(READY)** light will stop flashing and remain on

NOTE: the "Master Code" index #01 cannot be deleted, it can only be changed, take great care when changing the "Master Code" you will require the new code to get back into programming mode!

	Master Code	User index	New code for user #04
[PROG]	[1][2][3][4]	[0][4]	[1][0][2][9]
READY LIGHT	Flashing	Flashing	On
Buzzer	Long beep at end	Long beep at end	Long beep at end

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Setting the time and date (24 hour format)

The HSC505 has a built in history log of events that happen over time, these events are date and time stamped, therefore it is important that you set the time and date after the system is installed.

To set the time and date press and hold the **[PROG]** key until the "beep" is heard, now enter the "Master Code" **[1][2][3][4]** the **(READY)** light will start flashing, now press the following keys **[#][1]**. Now enter the hours, minutes, day, month and year e.g. **[h][h][m][m][D][D][M][M][Y][Y]** the **(READY)** light will go on showing that the process is complete.

E.g. 7:16am on 7 of May 2002 to set this time and date press the following keys

	Master Code	Mode	Hours	Minutes	Day	Month	Year
[PROG]	[1][2][3][4]	[#][1]	[0][7]	[1][6]	[0][7]	[0][5]	[0][2]
READY LIGHT	Flashing	Flashing	Flashing	Flashing	Flashing	Flashing	On
Buzzer	Long beep at end	Long beep at end	Long beep at end	Long beep at end	Long beep at end	Long beep at end	Long beep at end

If you make a mistake just press the **[HOME]** key and start again

Setting the Auto Arm time (24 hour format)

The HSC505 has a built in Auto Arm mode that will automatically arm the system at a fixed time each day.

To set the Auto Arm time press and hold the **[PROG]** key until the "beep" is heard, now enter the "Master Code" **[1][2][3][4]** the **(READY)** light will start flashing, now press the following keys **[#][2]**. Now enter the hours and minutes.

E.g. **[h][h][m][m]** the **(READY)** light will go on showing that the process is complete.

E.g. 11:30pm to set the Auto Arm to this time press the following keys

	Master Code	Mode	Hours	Minutes
[PROG]	[1][2][3][4]	[#][2]	[1][1]	[3][0]
READY LIGHT	Flashing	Flashing	Flashing	On
Buzzer	Long beep at end	Long beep at end	Long beep at end	Long beep at end

To disable Auto Arming press and hold the **[PROG]** key until the "beep" is heard, now enter the "Master Code" **[1][2][3][4]** the **(READY)** light will start flashing, now press the following keys **[#][2][*][*][*][*]** the **(READY)** light will go on showing that the process is complete.

If you make a mistake just press the **[HOME]** key and start again

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Command Summary

Convention used in this summary

[ ] = Buttons: ( ) = Lights: Note: [ARM] [HOME] [INSTANT] [BYPASS] [PANIC] [FIRE] [MED] [PROG] keys must be pressed for 2 seconds to respond, this stop accidental activation.

Arm & Away Quick mode active

Key	***LIGHT***	***Exit Delay***	***LIGHT***	
[ARM]	(ARM) Flashing	You must exit during this delay	(ARM) Steady	System armed

Arm & Home Quick mode active

Key	***LIGHT***	***Exit Delay***	***LIGHT***	
[HOME]	(ARM) Flashing (HOME) Steady	You could exit during this delay	(ARM) Steady (HOME) Steady	System armed

Arm & Home & Instant Quick mode active

Key	***LIGHT***	***Key***	***LIGHT***	
[HOME]	(ARM) Flashing (HOME) Steady	[INSTANT]	(ARM) Steady (HOME) Steady (INST) Steady	System armed

Arm & Instant Quick mode active (When keypad is outside active zones)

Key	***LIGHT***	
[INSTANT]	(ARM) Steady (INST) Steady	System armed

Zone Bypass Quick mode active

Key	***Zone number Key***	***LIGHT***
[BYPASS]	[4]	(ZONE 4) Flashing

Clear Zone Bypass Quick mode active

LIGHT	***Key***	***Zone number***	***LIGHT***
(ZONE 4) Flashing	[BYPASS]	[4]	(ZONE 4) Off

Arm & Away Normal mode active

Key	***4-Digit User Code***	***LIGHT***	***Exit Delay***	***LIGHT***	
[ARM]	[1][2][3][4]	(ARM) Flashing	You must exit during this delay	(ARM) Steady	System armed

Arm & Home Normal mode active

Key	***4-Digit User Code***	***LIGHT***	***Exit Delay***	***LIGHT***	
[HOME]	[1][2][3][4]	(ARM) Flashing (HOME) Steady	You could exit during this delay	(ARM) Steady (HOME) Steady	System armed

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Arm & Home & Instant Normal mode active

Key	*4-Digit User Code*	*User Code*	*Key*	*LIGHT*	
[HOME]	[1][2][3][4]	(ARM) Flashing (HOME) Steady	[INSTANT]	(ARM) Steady (HOME) Steady (INST) Steady	System armed

Zone Bypass Normal mode active

Key	*4-Digit User Code*	*Zone number Key*	*LIGHT*
[BYPASS]	[1][2][3][4]	[4]	(ZONE 4) Flashing

Clear Zone Bypass Normal mode active

LIGHT	*Key*	*4-Digit User Code*	*Zone number*	*LIGHT*
(ZONE 4) Flashing	[BYPASS]	[1][2][3][4]	[4]	(ZONE 4) Off

Disarm All Modes (No alarm condition)

LIGHT	*4-Digit User Code*	*LIGHT*
(ARM) On	[1][2][3][4]	(ARM) Off (READY) On System disarmed

Disarm All Modes (Zones violated)

LIGHT	*4-Digit User Code*	*LIGHT*	*4-Digit User Code*	*LIGHT*
(ARM) Rapid Flashing (ZONE X) Rapid Flashing	[1][2][3][4]	(ARM) Off (READY) Rapid Flashing (ZONE X) Rapid Flashing System disarmed	[1][2][3][4]	(ARM) Off (READY) On System disarmed

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Codes, Zones and other details.

KEEP THIS DETAIL SECURE

	Code number	Information
Master Code		
User Code 2		
User Code 3		
User Code 4		
User Code 5		
User Code 6		
User Code 7		
User Code 8		
User Code 9		
User Code 10		
User Code 11		
User Code 12		
Arm Only Code		
Control Code		
Duress Code		

	Information
Zone 1	
Zone 2	
Zone 3	
Zone 4	
Zone 5	
Zone 6	
Zone 7	
Zone 8	

KEY	Information
[#] KEY	

Control Centre Phone	
Reaction Force Phone	
Police Phone	
Fire Phone	
Ambulance Phone	

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Remote access commands.

Phone into the panel, the panel will answer after the programmed ring count with a dual tone.
After the dual tone:
Enter [*] key, a single beep will be heard
Enter the user code, the panel will indicate its present condition by a number of beeps.

1 beep = Panel is armed, no alarm condition
2 beeps = Panel is disarmed, no alarm condition
1 beep followed by a number of beeps indicating zone number in alarm.

1 beep = Zone 1, up to 8 beeps for zone 8
9 beeps = Keypad emergency condition
10 beeps = Panic or tamper condition on the mother board
Continuos beeps = AC fail condition

Command keys.

1 = Arm the system. The panel will confirm with 1 beep.
2 = Disarm the system. The panel will confirm with 2 beeps.
3 = Bypass zone/s. Press the [3] key followed by the zone number, 1 beep for bypass, 2 beeps for un-bypass.
4 = Last alarm. Press [4] for the last zone that was activated.
5 = Not used
6 = Not used
7 = Switch trigger number ? as programmed in question 53 location 2.
8 = Switch trigger number ? as programmed in question 53 location 3.
9 = Switch trigger number ? as programmed in question 53 location 4.
0 = Not used.
# = Disconnect.

Note
When the panel dials out, the alarm condition will be reported as a number of beeps followed by the house ID (1 to 15 panels can be monitored)
House ID programmed in question 49 location 1.

If user code number 13 is entered, then this function will allow “ARM ONLY” and trigger switching, and user code 15 will be duress.

Dial in arming with zone faulted.

- Dial into the panel after dual tone, enter [*] followed by user code. Panel indicates its present condition.
- Press [1] to arm. The panel will give a low tone to indicate it cannot arm followed by the faulted zone number.
- Press [3] followed by the zone number to bypass the zone.
- Press [1] for arm.

If additional zones are faulted follow the above procedure.

- Press [1] for arm. The panel will confirm with 1 beep.

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Switching of trigger outputs audible indication (phone keys 7, 8 and 9)

1 beep = Trigger on
2 beeps = Trigger off
3 beeps = A timed trigger has been switched and will automatically switch off after time out.

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Pi HSC505 and Pi HSC505R Home Security Controller

Programming & Information Manual

Release Versions	Release History	Date
R1a	firmware V1.00	01/08/2005

Introduction

This manual is designed to help you fully understand programming the HSC505 by using the keypad of the unit. The “User’s Guide” has been included in Appendix (A) as a reference.

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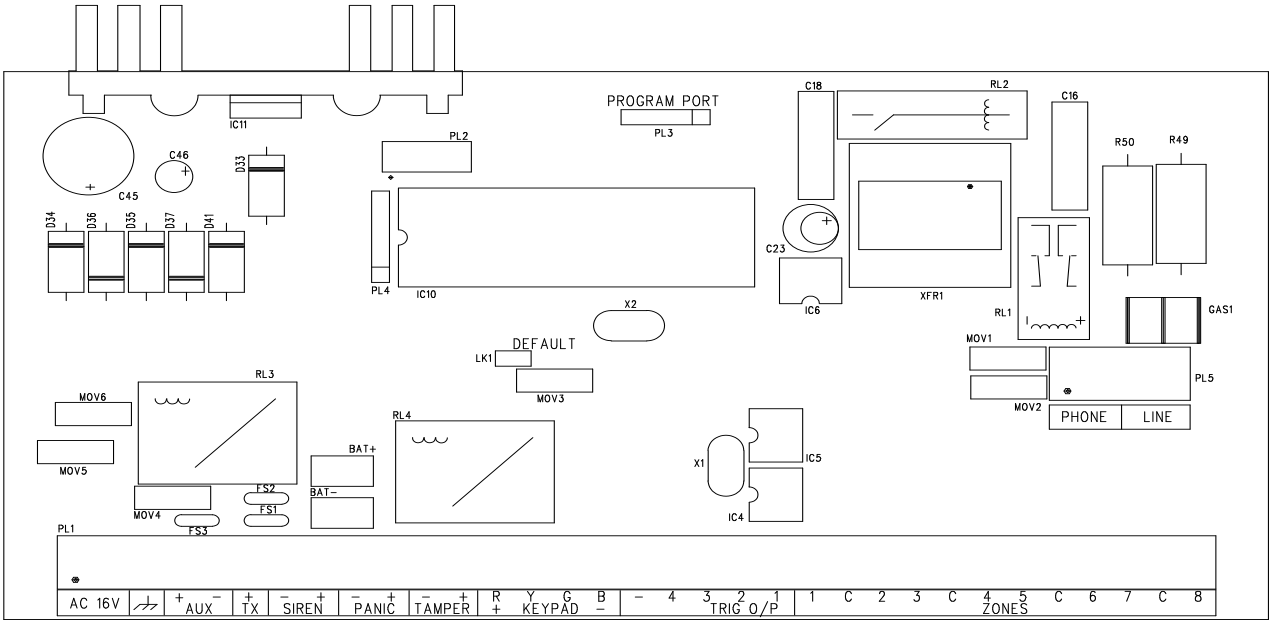

Unit Layout

AC……..AC input maximum 16.5V
(Earth).....This **must** be connected to building earth were possible alternately to mains earth.
AUX + ...12V + to peripherals i.e. IR detectors, beams etc (Fused at 1 amp)
AUX - .....Negative to peripherals
TX + ...Positive to Radio Transmitter (Fused at 3 amps)
Siren + ...Positive to Siren (Fused at 3 amps)
Siren - .....Negative to Siren
Panic - ……Panic negative EOL resistor 2k7
Panic + ……Panic positive
Tamper - ……Tamper negative
Tamper + ……Tamper positive
KEYPAD R +.....Keypad + (Red)
KEYPAD Y .....Keypad data (Yellow)
KEYPAD G.....Keypad data (Green)
KEYPAD B -.....Keypad – (Black)
TRIG -.....(Reserved do not use)
TRIG O/P 4 .....Trigger Output 4
TRIG O/P 3 .....Trigger Output 3
TRIG O/P 2 .....Trigger Output 2
TRIG O/P 1 .....Trigger Output 1
ZONE 1.....Zone 1 input EO TX - Negative to Radio Transmitter L resistor 2K7
C .....Common
ZONE 2.....Zone 2 input EOL resistor 2K7
ZONE 3.....Zone 3 input EOL resistor 2K7
C .....Common
ZONE 4 .....Zone 4 input EOL resistor 2K7
ZONE 5 .....Zone 5 input EOL resistor 2K7
C .....Common
ZONE 6 .....Zone 6 input EOL resistor 2K7
ZONE 7 .....Zone 7 input EOL resistor 2K7
C .....Common
ZONE 8 .....Zone 8 input EOL resistor 2K7

*Inputs

The HSC505 has two additional inputs that have the following functions

Panic: **E.O.L.** programmable as audible, silent, keyswitch or disabled.

Tamper: Normally open input to ground programmable as audible, silent, keyswitch or disabled**.**

For wiring diagrams see end of manual.

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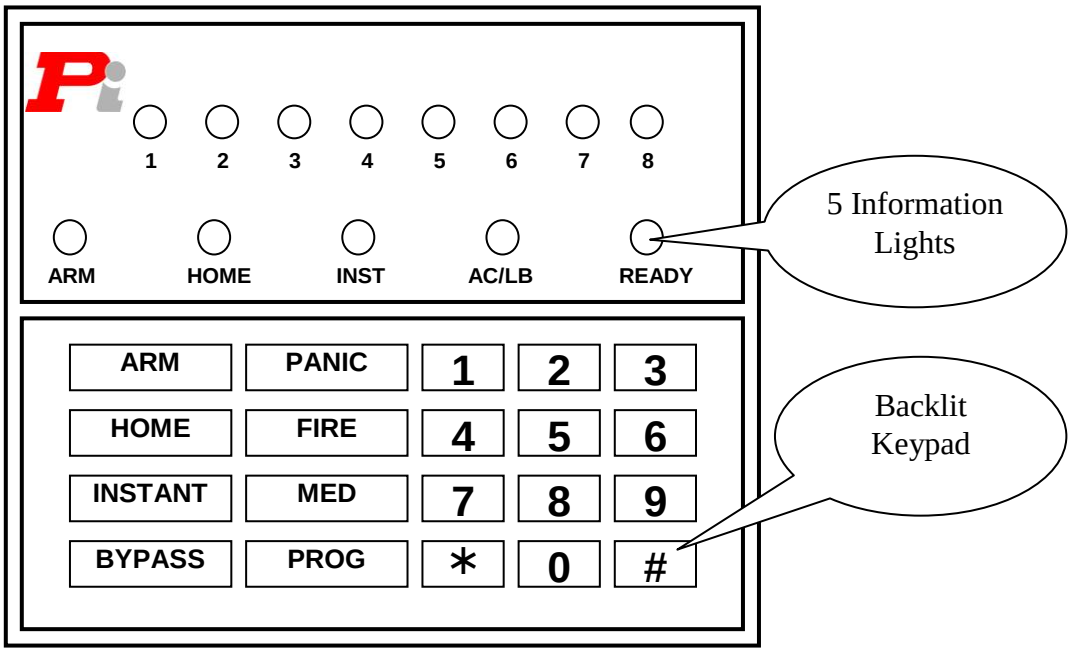
Keypad layout and LEDS

Convention used in this manual **[ ]** = Buttons **( )** = Lights



Information LED lights

(ARM) = On when the system is armed
(HOME) = On when the system is armed in the "Home" mode
(INST) = On when the system is armed in the "Instant" mode
(AC/LB) = On when there is power on the system. Flashing if the battery voltage is low
(READY) = On when the system is disarmed and no zones are triggered. Flashing when in program mode

(ARM)
(HOME)
(INST)
(AC/LB)
(READY)
= All flashing fast, battery voltage is critically low, the alarm will not operate in this condition and a service is required. See below "Battery Condition"

Keys

[ARM] = Used to arm the system
[HOME] = Used to arm the system in the home mode. Also used to cancel programming mode
[INSTANT] = Arms the system with no Entry or Exit delay time
[BYPASS] = Used to set or clear zone bypassing
[PANIC] = Activates an immediate Panic alarm and siren when pressed for 2 seconds
[FIRE] = Activates an immediate Fire alarm and "fire" siren when pressed for 2 seconds
[MED] = Activates an immediate Medical Alarm call when pressed for 2 seconds
[#][∗][0-9] = Used to enter data and information, see the following paragraphs

Battery Condition.

When the (**AC/LB**) led is flashing the battery voltage is lower than expected. This may be due to a mains fail condition, faulty charge or battery. If the mains have failed the condition will restore once the mains returns and the battery has had time to re-charge. If the condition does not change check your battery, charger, mains and all connections.
If the (**ARM**)(**HOME**)(**INST**)(**AC/LB**)(**READY**) leds are all flashing then the battery has reached a critically low voltage and the alarm cannot operate correctly. The keypad buzzer will sound when this condition occurs, pressing any key will stop the sound.

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Check this condition by entering the user 4-digit code at least twice, if no change occurs the alarm system will need servicing.
NOTE: the alarm will not function under the above condition.

If the alarm was armed before this critical battery condition occurred, you would be warned to this fact by the flashing leds. If zones were violated before the critical condition they will be flashing, provided that the battery voltage did not go below 6 volts.
Enter your user code twice to clear the condition.

Tamper and error conditions

Zone led and **Arm** led fast flash = **Alarm condition**
Zone led and **Arm** led and **Instant** led fast flash = **Zone tamper condition**.
Arm led and **Instant** led and **Ready** led fast flash = **Siren tamper**
Arm led and **Home** led fast flash = **Panic input triggered**
Arm led and **Instant** led = **Tamper input triggered**
AC/LB led slow flash = **Low battery condition**
AC/LB led fast flash = **Battery fail condition**
Home led fast flash = **Telephone line fail**
Home led slow flash = **Communication failure**
Instant led slow flash = **Remote Tx no acknowledge**

Defaulting control panel

Monitoring station Default. Reports all conditions via land line to monitoring station

Enter programming mode level 2, press [PROG] key to accept.
The panel will dial out on all conditions.

End User Monitoring Default. Reports only alarm conditions to end-user

Enter programming mode level 3, press [PROG] key to accept.
The panel will dial out only on alarm conditions

Normal keypad programming.

Enter programming mode level 1.
This is a global setting and will be the time required that is zone is triggered for, before any alarm condition takes place.

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Installer's Program Mode [1]

Please note that when power is first applied to the HSC505 all the LED's will flash for 6 seconds while the unit self-tests. *If the system was armed at the time power was removed, all active zones will be ignored for 2 minute after power restore*. This allows peripheral equipment to stabilise after power restore. If you are busy installing and testing you can clear this 2 minute timer by entering the "User's Code"

Selecting the Installer's program mode

Key Sequence	Sound	LED Action	
Press [PROG] until	Short followed by Long Beep	No Change	
[*]	Long beep	No Change	
[Four-digit installer code (Default 2580)]	Long Beep	No Change	
[1]	Short Beep	READY (Flashing)	Installer's mode active

Press and hold the [PROG] key until "Beep" is heard, then release. Then enter a [*] followed by the installer's 4-digit code [2][5][8][0] (default). Now enter the Installer's mode digit [1]. The (READY) LED will start flashing, this indicates that the Installer's Program Mode is active.
At this point you will be at question 1 location 1 as shown by the zone LED's. The question number is shown in binary form with Zone 1 being the LSB (Least Significant Bit) and Zone 8 the MSB (Most Significant Bit)

Zone 1 (1)	Zone 2 (2)	Zone 3 (4)	Zone 4 (8)	Zone 5 (16)	Zone 6 (32)	Zone 7 (64)	Zone 8 (128)
✦							

The data programmed in at this location will be shown by the information LED's. The (READY) LED will be flashing to show that you are in program mode.

Data Value	ARM (1)	HOME (2)	INST (4)	AC/LB (8)	READY (Flashing)
0					(✦)
1	✦				(✦)
2		✦			(✦)
3	✦	✦			(✦)
4			✦		(✦)
5	✦		✦		(✦)
6		✦	✦		(✦)
7	✦	✦	✦		(✦)
8				✦	(✦)
9	✦			✦	(✦)
A		✦		✦	(✦)
B	✦	✦		✦	(✦)
C			✦	✦	(✦)
D	✦		✦	✦	(✦)
E		✦	✦	✦	(✦)
F	✦	✦	✦	✦	(✦)

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Use the following key sequence to move to the next locations.

Key Sequence	Sound	LED Action	Note
[#]	Short Beep	Location data is shown	Starts at location 1 next press moves to next location.
[#]	Long Beep	Next question location 1	If at location 4 of the last question, pressing [#] will move you to the next question at location 1

To go directly to any question use the following key sequence once you are in "Installer Mode 1"

Key Sequence	Sound	LED Action	Note
[*]	Short Beep		
[Two-digit question number] e.g. [0] [1]	Long Beep	Question number is shown and location (1) data is shown	

E.g. [*][0][5] will take you to question 5 location 1

Zone 1 (1)	Zone 2 (2)	Zone 3 (4)	Zone 4 (8)	Zone 5 (16)	Zone 6 (32)	Zone 7 (64)	Zone 8 (128)
✦		✦					

E.g. [*][2][7] will take you to question 27 location 1

Zone 1 (1)	Zone 2 (2)	Zone 3 (4)	Zone 4 (8)	Zone 5 (16)	Zone 6 (32)	Zone 7 (64)	Zone 8 (128)
✦	✦		✦	✦			

When going directly to a question number you will always start at location 1 of that question. Use the following key sequence to move to the next locations.

Key Sequence	Sound	LED Action	Note
[#]	Short Beep	Location data is shown	Starts at location 1 next press moves to next location.
[#]	Long Beep	Next question location 1	If at location 4 of the last question, pressing [#] will move you to the next question at location 1

Pressing the [#] key when you are in the 4th location will step to the next question number at location 1. To enter data at a question location press the numeric keys [0] to [9] to enter values 0 to 9. To enter the values "A" to "F" you must press the following key sequence.

Key Sequence	Sound	LED Action	Value
[ARM] [1]	Short Beep	Changed location data is shown	A
[ARM] [2]	Short Beep	Changed location data is shown	B
[ARM] [3]	Short Beep	Changed location data is shown	C
[ARM] [4]	Short Beep	Changed location data is shown	D
[ARM] [5]	Short Beep	Changed location data is shown	E
[ARM] [6]	Short Beep	Changed location data is shown	F

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Changed data will be stored when you move to the next location or question and when you exit program mode. To exit from program mode press the [HOME] key. Please note: if the panel is left in programming mode without any keys being pressed the unit will automatically exit to normal mode after 1 minute.

Programming the Pi HSC505 from the keypad.

To program the HSC505 from the standard LED keypad, the installer's code must be entered after which a number of questions must be answered.
Each question has four (4) locations and below is a summary of each.

Question #	Description	Location 1	Location 2	Location 3	Location 4	Default
0	**Installer code**	Digit 1	Digit 2	Digit 3	Digit 4	2580
1	**Zone 1**	Zone Type	Report Code Digit 1	Report Code Digit 2	Select Output Action	1500
2	**Zone 2**	Zone Type	Report Code Digit 1	Report Code Digit 2	Select Output Action	3100
3	**Zone 3**	Zone Type	Report Code Digit 1	Report Code Digit 2	Select Output Action	4100
4	**Zone 4**	Zone Type	Report Code Digit 1	Report Code Digit 2	Select Output Action	4100
5	**Zone 5**	Zone Type	Report Code Digit 1	Report Code Digit 2	Select Output Action	4100
6	**Zone 6**	Zone Type	Report Code Digit 1	Report Code Digit 2	Select Output Action	4100
7	**Zone 7**	Zone Type	Report Code Digit 1	Report Code Digit 2	Select Output Action	4100
8	**Zone 8**	Zone Type	Report Code Digit 1	Report Code Digit 2	Select Output Action	4100
9	**Zone Options**	Set Chime Zones 1 to 4	Set Chime Zones 5 to 8	Set Home Zones 1 to 4	Set Home Zones 5 to 8	0000
10	**Bypass & Arming Options**	Fast Bypass	Fast Arm	Allow Zone Bypassing Zones 1 to 4	Allow Zone Bypassing Zones 5 to 8	0000
11	**Report Codes**	Disarm	**RESERVED**	Zone Bypass	**RESERVED**	4080
12	**Report Codes**	Quick Arm	**RESERVED**	Zone Restore	**RESERVED**	C0AA
13	**Report Codes**	Arm & Away	**RESERVED**	Arm & Home	**RESERVED**	40D0
14	**Report Codes**	Panic Digit 1	Panic Digit 2	Tamper Digit 1	Tamper Digit 2	4080
15	**Report Codes**	Auto-Test Digit 1	Auto-Test Digit 2	Auto-Arm Digit 1	Auto-Arm Digit 2	3050
16	**Report Codes**	Duress Digit 1	Duress Digit 2	Key Panic Digit 1	Key Panic Digit 2	5040
17	**Report Codes**	Key Fire Digit 1	Key Fire Digit 2	Key Med Digit 1	Key Med Digit 2	2010
18	**Report Codes**	AC Fail Digit 1	AC Fail Digit 2	AC Reset Digit 1	AC Reset Digit 2	10AA
19	**Report Codes**	Low Battery Digit 1	Low Battery Digit 2	Battery Restore Digit 1	Battery Restore Digit 2	20AA
20	**Report Codes**	Key Tamper Digit 1	Key Tamper Digit 2	Siren Tamper Digit 1	Siren Tamper Digit 2	8001
21	**Output Action on Event**	Panic Input	Tamper Input	Siren Tamper	Tel line fault	0000
22	**Output Action on Event**	Alarm Event	Panic Key Event	Medical Key Event	Fire Key Event	0000
23	**Output Action on Event**	Duress Event	Auto-Arm Event	Key Tamper Event	[#] Key Event	0000

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Question #	Description	Location 1	Location 2	Location 3	Location 4	Default
24	**Output Action on Event**	AC Fail Event	AC Restore Event	Low Battery Event	Auto Test Event	0000
25	**Output Action on Event**	Disarm Event	Arm Event	User 14 Code Event	**RESERVED**	000F
26	**Input & Output Options**	Preset State of Outputs	Panic event	Arm when faulted	Tamper Event	0202
27	**Output Timers**	Output 1 timer	Output 2 timer	Output 3 timer	Output 4 timer	0000
28	**Timers**	Primary Entry Delay	Secondary Entry Delay	Exit Delay	Siren On Time	555C
29	**Timers**	Auto test delay	Report Delay	AC Fail/Restore	Auto Rearm	0031
30	**Auto test time**	Hour x 10	Hour x 1	Minutes x 10	Minutes x 1	AAAA
31	**Auto Arm time**	Hour x 10	Hour x 1	Minutes x 10	Minutes x 1	AAAA
32	**Audible & Keypad Option**	Keypad Options	Siren Alert Options	Key Tamper	Restore Defaults	1011
33	**Control Options**	Battery error Digit 1	Battery error Digit 2	Siren Lockout Count	Error Beep	210F
34	**Dialler Options**	Dial Types	Dial Attempts	Ring count	**RESERVED**	0778
35	**Dialler Options**	Primary Format	**RESERVED**	Enable serial tx	Tel Err Timer	2011
36	**Zone Tamper**	Zone 1 to 4	Zone 5 to 8	Digit 1	Digit 2	00080
37	**Primary Phone Number**	Digit 1	Digit 2	Digit 3	Digit 4	FFFF
38	**Primary Phone Number**	Digit 5	Digit 6	Digit 7	Digit 8	FFFF
39	**Primary Phone Number**	Digit 9	Digit 10	Digit 11	Digit 12	FFFF
40	**Primary Phone Number**	Digit 13	Digit 14	Digit 15	Digit 16	FFFF
41	**Secondary Phone Number**	Digit 1	Digit 2	Digit 3	Digit 4	FFFF
42	**Secondary Phone Number**	Digit 5	Digit 6	Digit 7	Digit 8	FFFF
43	**Secondary Phone Number**	Digit 9	Digit 10	Digit 11	Digit 12	FFFF
44	**Secondary Phone Number**	Digit 13	Digit 14	Digit 15	Digit 16	FFFF
45	**RESERVED**	**RESERVED**	**RESERVED**	**RESERVED**	**RESERVED**	FFFF
46	**RESERVED**	**RESERVED**	**RESERVED**	**RESERVED**	**RESERVED**	FFFF
47	**RESERVED**	**RESERVED**	**RESERVED**	**RESERVED**	**RESERVED**	FFFF
48	**RESERVED**	**RESERVED**	**RESERVED**	**RESERVED**	**RESERVED**	FFFF
49	**Primary Account**	Digit 1	Digit 2	Digit 3	Digit 4	1234
50	**Secondary Account**	Digit 1	Digit 2	Digit 3	Digit 4	FFFF
51	**Pulse Count**	Zone 1 & 2	Zone 3 & 4	Zone 5 & 6	Zone 7 & 8	0000
52	**Pulse Count Time**	Seconds x 10	Seconds x 1	**RESERVED**	**RESERVED**	00AA
53	**Zone Response time triggers**	Seconds	Rem Trigger 1	Rem Trigger 2	Rem Trigger 4	0000
54-58	**Read Only User Codes**	Digit 1	Digit 2	Digit 3	Digit 4	FFFF

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Question 0 (Installer's Code)
Sets the 4-digit installer's code (Location 1 = Digit 1). The default value is 2580.

Question 1 to 8
Sets the zone type, report code digits and the output action on one of the four local outputs.

Q1-8 Location 1 (Zone Types)
Sets the zone types, the following types are available

- Disabled; The zone is not used in any way
- Primary Entry/Exit time delayed; The zone has an entry time delay set by (Q28L1) and an exit time delay set by (Q28L3)
- Secondary Entry/Exit time delayed; The zone has an entry time delay set by (Q28L2) and an exit time delay set by (Q28L3). Note: the exit delay time is common to both Primary and Secondary zones
- Follower; Follower zones are normal zones that will not trigger while exit and entry timers are active. This allows someone to arm the system and then leave via the follower zones. On entry to an armed system the person must enter via an entry zone and then proceed via the follower zones to the keypad to disarm the system.
- Instant when alarmed with siren; This zone will instantly arm (no time delay) with siren triggering when violated.
- 24 hour audible, This zone will always be instantly arm (no time delay) with siren triggering when violated. (24 Hour alarm – Panic etc)
- Fire Zone. This is a 24-hour alarm, used to monitor fire smoke detectors. When activated the siren will have an intermittent sound.
- Instant silent, This zone will instantly arm (no time delay) without siren triggering when violated. Silent alarm.
- Always alarmed instant with no siren; This zone will always be instantly arm (no time delay) without siren triggering when violated. (24 Hour alarm – Duress monitoring etc)

Program Value	Zone Types
0	Disabled
1	Primary Entry/Exit
2	Secondary Entry/Exit
3	Follower
4	Instant audible
5	24 Hour audible
6	Fire
E	Instant silent
F	24 Hour silent

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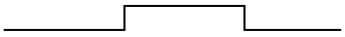
Q1-8 Location 2 & 3 (Zone Report Code)
NOTE: The value “AA” disables the code from being sent
Sets the report code for this zone location 2 = digit 1, location 3 = digit 2. The values “0” to “F” are allowed, but exact values will depend on the communications format selected (see Q35L1 & Q35L2)

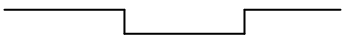
Location 4 (Select Output Action per zone)
Sets the output action when the zone is violated.

Program Value	Output Action
0	Disabled
1	Output 1 Timed
2	Output 1 Latched to GND
3	Output 1 Latched to 12V
4	Output 2 Timed
5	Output 2 Latched to GND
6	Output 2 Latched to 12V
7	Output 3 Timed
8	Output 3 Latched to GND
9	Output 3 Latched to 12V
A	Output 4 Timed
B	Output 4 Latched to GND
C	Output 4 Latched to 12V
D	Output 1 Toggle
E	Output 2 Toggle
F	Output 3 Toggle

There are four local outputs from the panel and each can be set to the following actions when the zone is violated. Disabled (do nothing), timed output, latch to ground via 47 ohms (50mA at 12 volts maximum) or latch to 12 volts via 1000 ohms (12mA maximum).

The polarity state of the outputs are set at Q26L1, remember if the pre-set state of a output is ground and you set its action to toggle to ground, no action will happen. If the action is set to “timed” then the timed pulse will be opposite to the pre-set state.

Pre-set state ground = positive timed pulse 

Pre-set state 12 volts = negative timed pulse 

The timed duration is set at Q27L1 for output 1
The timed duration is set at Q27L2 for output 2
The timed duration is set at Q27L3 for output 3
The timed duration is set at Q27L4 for output 4

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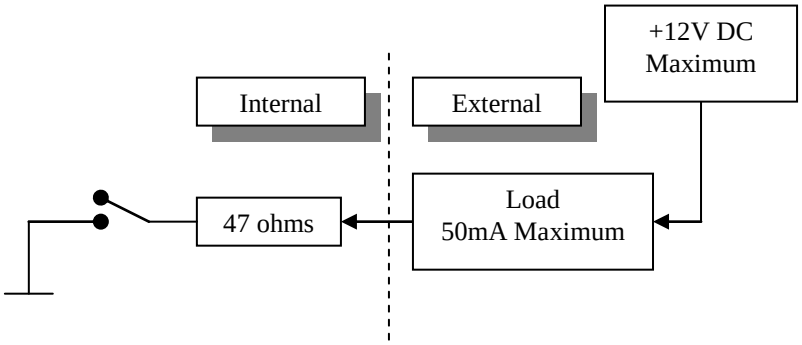
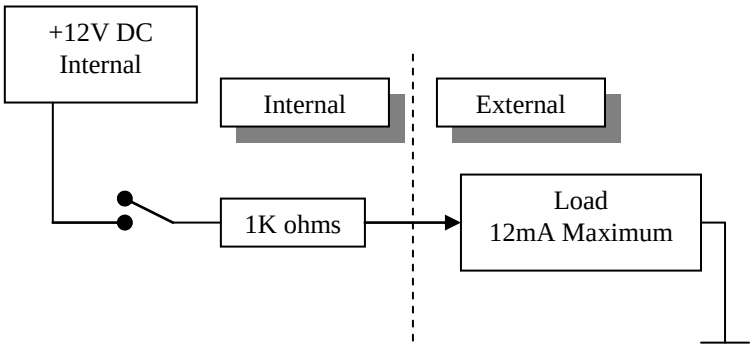
Output characteristics are:

Switching to internal ground
Maximum input voltage is 12 volts and maximum load is 50mA



Switching to internal 12 volts
Maximum current to ground is 12mA



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Question 9 (Zone Options)
Sets Chime and Home options for each zone.

Q9 Location 1 & 2 (Chime Zones)
Sets zones 1 to 8 as Chime zones. The zone will trigger the keypad's beeper briefly each time it is violated. This will only happen when the system is disarmed.

Location 1

Value	Chime Zone 1	Chime Zone 2	Chime Zone 3	Chime Zone 4
0				
1	✓			
2		✓		
3	✓	✓		
4			✓	
5	✓		✓	
6		✓	✓	
7	✓	✓	✓	
8				✓
9	✓			✓
A		✓		✓
B	✓	✓		✓
C			✓	✓
D	✓		✓	✓
E		✓	✓	✓
F	✓	✓	✓	✓

Location 2

Value	Chime Zone 5	Chime Zone 6	Chime Zone 7	Chime Zone 8
0				
1	✓			
2		✓		
3	✓	✓		
4			✓	
5	✓		✓	
6		✓	✓	
7	✓	✓	✓	
8				✓
9	✓			✓
A		✓		✓
B	✓	✓		✓
C			✓	✓
D	✓		✓	✓
E		✓	✓	✓
F	✓	✓	✓	✓

Q9 Location 3 & 4 (Home Zones)
Sets zones 1 to 8 as Home zones. Home zones will not trigger an alarm when the panel is armed in the Home mode. Do not set any 24-hour zones types to "Home" zones, the 24-hour mode will be overriding.

Location 3

Value	Home Zone 1	Home Zone 2	Home Zone 3	Home Zone 4
0				
1	✓			
2		✓		
3	✓	✓		
4			✓	
5	✓		✓	
6		✓	✓	
7	✓	✓	✓	
8				✓
9	✓			✓
A		✓		✓
B	✓	✓		✓
C			✓	✓
D	✓		✓	✓
E		✓	✓	✓
F	✓	✓	✓	✓

Location 4

Value	Home Zone 5	Home Zone 6	Home Zone 7	Home Zone 8
0				
1	✓			
2		✓		
3	✓	✓		
4			✓	
5	✓		✓	
6		✓	✓	
7	✓	✓	✓	
8				✓
9	✓			✓
A		✓		✓
B	✓	✓		✓
C			✓	✓
D	✓		✓	✓
E		✓	✓	✓
F	✓	✓	✓	✓

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Question 10 (Bypass & Arming Options)

Sets Bypass & Arming Options

Q10 Location 1 (Fast Bypass)

Enabled = value 1; [BYPASS] [*zone number*]
Disabled = value 0; [BYPASS] [*4 digit user code*] [*zone number*]

Value	Fast Bypass Enabled
0	
1	✓

Q10 Location 2 (Fast Arm)

Enabled = value 1; Press [INSTANT] or [HOME] to arm the system
Disabled = value 0; Press [INSTANT] or [HOME] and then the [*4 digit user code*] to arm the system

Value	Fast Arm Enabled
0	
1	✓

Q10 Location 3 & 4 (Allow Zone Bypassing)

Enable Zones that are allowed to be bypassed.

Zone Bypassing allowed

Location 3

Program Value	Zone 1	Zone 2	Zone 3	Zone 4
0	✓	✓	✓	✓
1		✓	✓	✓
2	✓		✓	✓
3			✓	✓
4	✓	✓		✓
5		✓		✓
6	✓			✓
7				✓
8	✓	✓	✓	
9		✓	✓	
A	✓		✓	
B			✓	
C	✓	✓		
D		✓		
E	✓			
F				

Location 4

Program Value	Zone 5	Zone 6	Zone 7	Zone 8
0	✓	✓	✓	✓
1		✓	✓	✓
2	✓		✓	✓
3			✓	✓
4	✓	✓		✓
5		✓		✓
6	✓			✓
7				✓
8	✓	✓	✓	
9		✓	✓	
A	✓		✓	
B			✓	
C	✓	✓		
D		✓		
E	✓			
F				

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Question 11 (Report Codes)
Report codes NOTE: The value “A” disables the code from being sent

Q11 Location 1 (Disarm)
Sets a 1-digit code to report the disarm condition
Q11 Location 2 (Reserved)
Q11 Location 3 (Zone Bypass)
Sets a 1-digit code to report the bypass condition when the system is armed
Q11 Location 4 (Reserved)

Question 12 (Report Codes)
Report codes NOTE: The value “A” disables the code from being sent

Q12 Location 1 (Quick Arm)
Sets a 1-digit code to report the arm condition
Q12 Location 2 (Reserved)
Q12 Location 3 (Zone Restore)
Sets a 1-digit code to report the restore condition. The code is sent after the siren stops and the zone restores
Q12 Location 4 (Reserved)

Question 13 (Report Codes)
Report codes NOTE: The value “A” disables the code from being sent

Q13 Location 1 (Arm & Away)
Sets a 1-digit code to report the arm condition
Q13 Location 2 (Reserved)
Q13 Location 3 (Arm & Home)
Sets a 1-digit code to report the arm condition
Q13 Location 4 (Reserved)

Question 14 (Report Codes)
Report codes NOTE: The value “A” disables the code from being sent

Q14 Location 1& 2 (Panic code)
Sets the 2-digit report code sent when Panic input is activated
Q14 Location 3 & 4 (Tamper code)
Sets the 2-digit report code sent when Tamper input is activated

Question 15 (Report Codes)
Report codes NOTE: The value “A” disables the code from being sent

Q15 Location 1& 2 (Auto Test code)
Sets the 2-digit report code sent when the system auto-tests
Q15 Location 3 & 4 (Auto Arm code)
Sets the 2-digit report code sent when the system auto-arms

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Question 16 (Report Codes)
Report codes NOTE: The value “A” disables the code from being sent

Q16 Location 1 & 2 (Duress Code)
Sets the Duress 2-digit report code. (Location 1 = digit 1 & Location 2 = digit 2). This code is sent when the “Duress” code is entered.
Q16 Location 3 & 4 (Panic Key)
Sets the Panic key 2-digit report code. (Location 3 = digit 1 & Location 4 = digit 2). This code is sent when the [PANIC] key is pressed.

Question 17 (Report Codes)
Report codes NOTE: The value “A” disables the code from being sent

Q17 Location 1 & 2 (Fire Key)
Sets the Fire key 2-digit report code. (Location 1 = digit 1 & Location 2 = digit 2). This code is sent when the [FIRE] key is pressed.
Q17 Location 3 & 4 (Medical Key)
Sets the Medical key 2-digit report code. (Location 3 = digit 1 & Location 4 = digit 2). This code is sent when the [MEDICAL] key is pressed.

Question 18 (Report Codes)
Report codes NOTE: The value “A” disables the code from being sent

Q18 Location 1 & 2 (AC Fail)
Sets the AC Fail 2-digit report code. (Location 1 = digit 1 & Location 2 = digit 2). This code is sent after delay time set at Q29L3
Q18 Location 3 & 4 (AC Restore)
Sets the AC Restored 2-digit report code. (Location 3 = digit 1 & Location 4 = digit 2). This code is sent after delay time set at Q29L3

Question 19 (Report Codes)
Report codes NOTE: The value “A” disables the code from being sent

Q19 Location 1 & 2 (Low Battery)
Sets the Low Battery 2-digit report code. (Location 1 = digit 1 & Location 2 = digit 2. This code is sent when the battery falls below the preset low voltage limit for longer than 3 minutes.
Q19 Location 3 & 4 (Battery Restore)
Set the Battery Restore 2-digit report code. (Location 3 = digit 1 & Location 4 = digit 2). This code is sent after a “Battery Low” condition is restored.

Question 20 (Report Codes)
Report codes NOTE: The value “A” disables keypad tampering and no code will be sent

Q20 Location 1 & 2 (Tamper Key)
Sets the Keypad Tamper 2-digit report code. (Location 1 = digit 1 & Location 2 = digit 2). This code is sent when keypad tampering is detected.

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Q20 Location 3 & 4 (Siren Tamper)
Sets the Siren Tamper 2-digit report code. (Location 1 = digit 1 & Location 2 = digit 2).

Question 21 (Output Action on Event)
Sets Output Action on Event

Q21 Location 1 (Panic Event)
Sets the output action when the panic input is triggered
Q21 Location 2 (Tamper Event)
Sets the output action when the tamper input is triggered.
Q21 Location 3 (Siren Tamper)
Sets the output action when the siren tamper input is triggered
Q21 Location 4 (Telephone line fault)
Sets the output action when the telephone line fails.

Question 22 (Output Action on Event)
Sets Output Action on Event

Q22 Location 1 (Alarm Event)
Sets the output action when an Alarm event occurs.
Q22 Location 2 (Panic Key Event)
Sets the output action when a Panic key press event occurs.
Q22 Location 3 (Medical Key Event)
Sets the output action when a Medical key press event occurs.
Q22 Location 4 (Fire Key Event)
Sets the output action when a Fire key press event occurs.

Program Value	Output Action
0	Disabled
1	Output 1 Timed
2	Output 1 Latched to GND
3	Output 1 Latched to 12V
4	Output 2 Timed
5	Output 2 Latched to GND
6	Output 2 Latched to 12V
7	Output 3 Timed
8	Output 3 Latched to GND
9	Output 3 Latched to 12V
A	Output 4 Timed
B	Output 4 Latched to GND
C	Output 4 Latched to 12V
D	Output 1 Toggle
E	Output 2 Toggle
F	Output 3 Toggle

Question 23 (Output Action on Event)
Sets Output Action on Event

Q23 Location 1 (Duress)
Sets the output action when a Duress code event occurs.

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Q23 Location 2 (Auto-Arm Event)
Sets the output action when the system Auto-Arms
Q23 Location 3 (Keypad Tamper Event)
Sets the output action when a keypad tamper is detected
Q23 Location 4 ([#] Key Event)
Sets the output action when the [#] Key is pressed. This could be used to open a gate or to reset a Smoke Detector after it has triggered.

Question 24 (Output Action on Event)
Sets Output Action on Event

Q24 Location 1 (AC Fail Event)
Sets the output action when a mains AC fail event occurs.
Q24 Location 2 (AC Restore Event)
Sets the output action when a mains AC restore event occurs.
Q24 Location 3 (Low Battery Event)
Sets the output action when a low battery event occurs.
Q24 Location 4 (Auto Test Event)
Sets the output action when an Auto test event occurs.

Question 25 (Output Action on Event)
Sets Output Action on Event

Q25 Location 1 (Disarm Event)
Sets the output action when an Open event occurs.
Q25 Location 2 (Arm Event)
Sets the output action when a Close event occurs.
Q25 Location 3 (User 14 Code Event)
Sets the output action when a User 14 Code event occurs. Normally used to operate a door strike lock, etc.
Q25 Location 4 (Reserved)
Reserved

Program Value	Output Action
0	Disabled
1	Output 1 Timed
2	Output 1 Latched to GND
3	Output 1 Latched to 12V
4	Output 2 Timed
5	Output 2 Latched to GND
6	Output 2 Latched to 12V
7	Output 3 Timed
8	Output 3 Latched to GND
9	Output 3 Latched to 12V
A	Output 4 Timed
B	Output 4 Latched to GND
C	Output 4 Latched to 12V
D	Output 1 Toggle
E	Output 2 Toggle
F	Output 3 Toggle

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Question 26 (Input & Output Options)

Sets Input & Output Options

Q26 Location 1 (Preset the +12v state of the Outputs)

Presets the default polarity of each output. This is the state of each output after power-up.

Value	Output 1 Positive	Output 2 Positive	Output 3 Positive	Output 4 Positive
0				
1	✓			
2		✓		
3	✓	✓		
4			✓	
5	✓		✓	
6		✓	✓	
7	✓	✓	✓	
8				✓
9	✓			✓
A		✓		✓
B	✓	✓		✓
C			✓	✓
D	✓		✓	✓
E		✓	✓	✓
F	✓	✓	✓	✓

Q26 Location 2 (Panic Input Modes)

This option sets the action of the Panic input

Value 0 = Disabled
Value 1 = Keyswitch
Value 2 = 24Hr Audible (Note: See Q14 L1 & L2 for reporting codes)
Value 3 = 24Hr Silent

Value	Disabled	Key Switch	24hr Audible	24hr Silent
0	✓			
1		✓		
2			✓	
3				✓

Q26 Location 3 (Armed when faulted)

If enabled this function allows the system to be armed with either an entry/exit or a follower zone being active.
The zone must be reset before the exit timer expires or an alarm condition will occur.

Value	Arm when faulted Enabled
0	
1	✓

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Q26 Location 4 (Tamper Input Modes)
This option sets the action of Tamper input
Value 0 = Disabled
Value 1 = Keyswitch
Value 2 = 24Hr Audible (Note: See Q14 L3 & L4 for reporting codes)
Value 3 = 24Hr Silent

Value	Disabled	Key Switch	24hr Audible	24hr Silent
0	✓			
1		✓		
2			✓	
3				✓

Question 27 (Output Timers)
Sets the Output Timers

Q27 Location 1 (Output 1 timer)
Sets the timed duration for output 1
Q27 Location 2 (Output 2 timer)
Sets the timed duration for output 2
Q27 Location 3 (Output 3 timer)
Sets the timed duration for output 3
Q27 Location 4 (Output 4 timer)
Sets the timed duration for output 4

Value	Output 1, 2, 3 or 4 Timers
0	2 Seconds
1	4 Seconds
2	6 Seconds
3	10 Seconds
4	20 Seconds
5	30 Seconds
6	40 Seconds
7	50 Seconds
8	1 Minute
9	1.5 Minutes
A	2 Minutes
B	2.5 Minutes
C	3 Minutes
D	3.5 Minutes
E	4 Minutes
F	4.25 Minutes

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Question 28 (Timers)
Sets Timers

Q28 Location 1 (Primary Entry Delay)
Sets the primary entry delay time
Q28 Location 2 (Secondary Entry Delay)
Sets the secondary entry delay time
Q28 Location 3 (Exit Delay)
Sets the exit delay time
Q28 Location 4 (Siren On Time)
Sets the length of time that the siren will be on

Value	Delay times
0	2 Seconds
1	4 Seconds
2	6 Seconds
3	10 Seconds
4	20 Seconds
5	30 Seconds
6	40 Seconds
7	50 Seconds
8	1 Minute
9	1.5 Minutes
A	2 Minutes
B	2.5 Minutes
C	3 Minutes
D	3.5 Minutes
E	4 Minutes
F	4.25 Minutes

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Question 29 (Timers)

Sets Timers

Q29 Location 1 (Auto Test delay)

Sets the delay between auto-tests. Disable auto-testing by setting the report code to “AA” in Q15 L1 & L2

Value	Delay times
0	1 Day
1	2 Days
2	3 Days
3	4 Days
4	5 Days
5	6 Days
6	7 Days
7	8 Days
8	9 Days
9	10 Days
A	11 Days
B	12 Days
C	13 Days
D	14 Days
E	15 Days
F	16 Days

Q29 Location 2 (Reporting delay)

Sets the delay time between an event and the reporting communications-taking place

Value	Delay times
0	No delay
1	1 Seconds
2	2 Seconds
3	3 Seconds
4	4 Seconds
5	5 Seconds
6	6 Seconds
7	7 Seconds
8	8 Seconds
9	9 Seconds
A	10 Seconds
B	11 Seconds
C	12 Seconds
D	13 Seconds
E	14 Seconds
F	15 Seconds

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Q29 Location 3 (AC Fail/Restore delay)

Sets the delay time between a mains AC fail or restore and the event being triggered.

Value	Delay times
0	1 Minute
1	5 Minutes
2	10 Minutes
3	15 Minutes
4	20 Minutes
5	25 Minutes
6	30 Minutes
7	35 Minutes
8	40 Minutes
9	45 Minutes
A	50 Minutes
B	55 Minutes
C	60 Minutes
D	65 Minutes
E	70 Minutes
F	75 Minutes

Q29 Location 4 (Auto Re-arm enable)

Selects the panel to automatically rearm if disarmed with a keyswitch input and no zone is violated within 2 minutes

Value	Disable	Enable
1	✓	
0		✓

Question 30 (Auto Test Time)

Sets Auto test time (24 hour format)

Q30 Location 1 & 2 (Hours)

Sets the real time that an auto-test will occur

Q30 Location 3 & 4 (Minutes)

Sets the real time that an auto-test will occur

E.g. Auto test at 23h37m (11:37pm) L1 = 2; L2 = 3; L3 = 3; L4 = 7

To disable the Auto-Test timer enter “A” into location L1, L2, L3 & L4

Value	L1 Digit 1 Hours	L2 Digit 2 Hours	L3 Digit 1 Minutes	L4 Digit 2 Minutes
0				
1				
2	✓			
3		✓	✓	
4				
5				
6				
7				✓
8				
9				
A	Disable	Disable	Disable	Disable

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Question 31 (Auto Arm Time)
Sets Auto Arm time (24 hour format)

Q31 Location 1 & 2 (Hours)
Sets the real time that the alarm will auto-arm
Q31 Location 3 & 4 (Minutes)
Sets the real time that the alarm will auto-arm
E.g. Auto Arm at 20h30 (8:30pm) L1 = 2; L2 = 0; L3 = 3; L4 = 0
To disable the Auto Arm enter “A” into location L1, L2, L3 & L4

Value	L1 Digit 1 Hours	L2 Digit 2 Hours	L3 Digit 1 Minutes	L4 Digit 2 Minutes
0		✓		✓
1				
2	✓			
3			✓	
4				
5				
6				
7				
8				
9				
A	Disable	Disable	Disable	Disable

Question 32 (Audible & Keypad Options)
Sets Audible and Keypad Options

Q32 Location 1 (Keypad options)

Value	Silent Panic Key	Audible Panic Key
0	✓	
1		✓

Q32 Location 2 (Siren Alert option)
Enable or disable siren audible feature. When enabled the following sounds are true

Value	Enable Siren Alert
0	
1	✓

No sound = System not ready, cannot arm
Single siren pulse = System armed (peep)
Double siren pulse = System disarmed (peep peep)
Triple siren pulse = When disarming indicates that a zone was violated while you were out (peep peep peep)

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Q32 Location 3 (Key Tamper)

Selects if an alarm condition will occur after 21 incorrect key depressions.

Value	Enable	Disable
0	✓	
1		✓

Q32 Location 4 (Restore Defaults)

Sets different levels of access for clearing the system back to its default values.
Value 0 = Disabled
Value 1 = Allow on board link LK1 to restore defaults

Value	Disabled	LK1 Restores Defaults
0	✓	
1		✓

Question 33 (Reporting and Control Options)

Q33 Location 1 (Battery error digit 1)

Reporting code digit 1

Q33 Location 2 (Battery error digit 2)

Reporting code digit 2

Q33 Location 3 (Siren Lockout Count)

Sets the number of times the siren will sound in one arm cycle,

Value	Siren Lockout Count
0	Count Disabled (Default)
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
A	10
B	11
C	12
D	13
E	14
F	15

Q33 Location 4 (Error Beep enable)

Selects a keypad beep on an error condition

Value	Disable	Enable
0	✓	
1		✓

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Question 34 (Dialler Options)

Sets Dialler options

Q34 Location 1 (Dial types)

Sets the dialling type for the system

Value	Dial Types
0	No Dial – Disable dialling
1	DTMF Tone (Default)

Q34 Location 2 (Dial Attempts)

Sets the number of times the system will attempt to dial before stopping with a communications fail

Value	Dial Attempts
0	1
1	2
2	3
3	4
4	5
5	6
6	7
7	8 (Default)
8	9
9	10
A	11
B	12
C	13
D	14
E	15
F	16

Q34 Location 3 (Ring Count)

Sets the number of rings before the system will auto-answer incoming calls.

Value	Ring Count
0	Disable auto-answer
1	2
2	4
3	6
4	8
5	10
6	12
7	14
8	16
9	18
A	20
B	22
C	24
D	26
E	28
F	30

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Q34 Location 4 (Telephone error time)
Reserved

Value	Telco Error
0	Disable Telco error
1	2
2	4
3	6
4	8
5	10
6	12
7	14
8	16
9	18
A	20
B	22
C	24
D	26
E	28
F	30

Question 35 (Dialler Options)
Sets Dialler options

Q35 Location 1 (Primary Formats)
Sets the reporting format used by the system

Value	Primary Formats
0	ADEMCO 4 x 1 Express
1	ADEMCO 4 x 2 Express
2	ADEMCO Point ID (Default)
3	Pulse 4 x 2 No parity 20PPS

Values 0 to 2 are digital reporting formats.
Value 3 is a pulse reporting format at 20 pulses per second, 1800 Hz transmit and 2300 Hz handshake (HS).
NOTE: The value 3 reporting format requires panel firmware V1.00r4 or higher and PC Configuration software V1.00r3 or higher. These versions were released on the 25/4/2002

Q35 Location 2 (Enable serial radio)
Enable the serial radio transmitter

Value	Disable	Enable
0	✓	
1		✓

Q35 Location 3 (Telephone fault digit 1)
Reporting code digit 1

Q35 Location 4 (Telephone fault digit 2)
Reporting code digit 2

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Question 36 (Zone tamper enable)

Q36 Location 1

Enable Zone Tamper 1 to 4

Value	Zone1 Tamper	Zone 2 Tamper	Zone 3 Tamper	Zone 4 Tamper
0				
1	✓			
2		✓		
3	✓	✓		
4			✓	
5	✓		✓	
6		✓	✓	
7	✓	✓	✓	
8				✓
9	✓			✓
A		✓		✓
B	✓	✓		✓
C			✓	✓
D	✓		✓	✓
E		✓	✓	✓
F	✓	✓	✓	✓

Q36 Location 2

Enable Zone Tamper 5 to 8

Value	Zone 5 Tamper	Zone 6 Tamper	Zone 7 Tamper	Zone 8 Tamper
0				
1	✓			
2		✓		
3	✓	✓		
4			✓	
5	✓		✓	
6		✓	✓	
7	✓	✓	✓	
8				✓
9	✓			✓
A		✓		✓
B	✓	✓		✓
C			✓	✓
D	✓		✓	✓
E		✓	✓	✓
F	✓	✓	✓	✓

Q36 Location 3

Zone tamper reporting code digit 1

Q36 Location 4

Zone tamper reporting code digit 2

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ADEMCO Point ID

Burglary Zone Types				
Description	**Event Qualifier**	**Event Code**	**Digit 1**	**Digit 2**
Audible Panic	1	123	0	0
Burglary	1= Burg 3= Res	130	1	0
Perimeter	1	131	2	0
Interior	1	132	3	0
Silent Instant	1	146	4	0
Entry / Exit	1	134	5	0
Day / Night	1	135	6	0
Outdoor	1	136	7	0
Tamper	1	137	8	0
Silent Panic	1	122	9	0
NULL (Disabled)			A	A
General Alarm	1	140	B	0
Foil Break	1	155	C	0
Day Trouble	1	156	D	0
Sensor Tamper	1	144	E	0
Pendent Transmitter	1	101	F	0

General Types				
Description	**Event Qualifier**	**Event Code**	**Digit 1**	**Digit 2**
AC	1= Fail 3= Restore	301	1	0
Low Battery	1	302	2	0
Test Reports (Auto)	1	602	3	0
Open Close By User	1= Open 3= Close	401	4	0
Auto Arm	3	403	5	0
Cancel on Open	1	406	6	0
Remote Arm	3	407	7	0
Zone Bypass	1	570	8	0
Fire Zone Bypass	1	571	9	0
NULL (Disabled)			A	A
24 Hour Zone Bypass	1	572	B	0
Quick Arm	3	408	C	0
Arm Home (Stay)	3	441	D	0
Key Switch	1= Open 3= Close	409	E	0
Time/date inaccurate	1	626	F	0
Bell Trouble	1	321	0	1
Telco Fault	1= Fail 3= Restore	351	1	1
Battery Test Fail	1	309	2	1

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24 Hour Types				
Description	**Event Qualifier**	**Event Code**	**Digit 1**	**Digit 2**
Medical	1	100	1	0
Fire	1	110	2	0
Smoke	1	111	3	0
Panic	1	120	4	0
Duress	1	121	5	0
Silent Panic	1	122	6	0
Audible Panic	1	123	7	0
Tamper By Zone	1	137	8	0
24 Hour	1	133	9	0
NULL (Disabled)			A	A
Refrigeration	1	152	B	0
Water Leak	1	154	C	0
24 Hours Non-Burglary	1	150	D	0
Pendent Transmitter	1	101	E	0
Gas Detect	1	151	F	0

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Question 37 – 40 (Primary Phone Number)
Sets the primary phone number dialled when the alarm reports in. Up to sixteen digits can be entered.
Value “C” will insert a 3 second delay in the dialling sequence. Normally used for PABX dial through
Value “F” will stop the dialling sequence

Question 41 – 44 (Secondary Phone Number)
Sets the secondary phone number dialled when the alarm reports in. Up to sixteen digits can be entered.
Value “C” will insert a 3 second delay in the dialling sequence. Normally used for PABX dial through
Value “F” will stop the dialling sequence

Question 45 – 48 (Reserved)
Reserved

E.g. to dial the Primary number 0,011 466 2300 the table is shown below. Remember to end the number with the value “F”. The remaining digits D12 to D16 can remain un-programmed.

	Q37L1	Q37L2	Q37L3	Q37L4	Q38L1	Q38L2	Q38L3	Q38L4	Q39L1	Q39L2	Q39L3	Q39L4	Q40L1	Q40L2	Q40L3	Q40L4
Value	**D1**	**D2**	**D3**	**D4**	**D5**	**D6**	**D7**	**D8**	**D9**	**D10**	**D11**	**D12**	**D13**	**D14**	**D15**	**D16**
0	✓		✓								✓	✓				
1				✓	✓											
2									✓							
3										✓						
4						✓										
5																
6							✓	✓								
7																
8																
9																
A																
B																
C (Pause)		✓														
D																
E																
F (Stop)													✓			

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Question 49 (Primary Account)
Sets the 4-digit Primary Account ID

Location 1, 2, 3 & 4 (Primary Account Digits 1 to 4)
Default is 1234

Question 50 (Secondary Account)
Sets the 4-digit Secondary Account ID (Location 1 = digit 1).

Location 1, 2, 3 & 4 (Secondary Account Digits 1 to 4)
Default is FFFF (disabled)

E.g. Primary Account set to 1234 the table is shown below

	Q49L1	Q49L2	Q49L3	Q49L4
Value	D1	D2	D3	D4
0				
1	✓			
2		✓		
3			✓	
4				✓
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

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QUESTION 51: Pulse count (knocks per zone).
Each of the 8 zones, are programmable to a pulse count of between 1 and 4 pulses. (Only on instant zone types value location 1 or 4 or E)

Location 1 = Pulse counts zones 1 & 2,
Location 2 = Pulse counts zones 3 & 4
Location 3 = Pulse counts zones 5 & 6,
Location 4 = Pulse counts zones 7 & 8

Location 1

Prog Value	Zone 1	Zone 2
0	1	1
1	2	1
2	3	1
3	4	1
4	1	2
5	2	2
6	3	2
7	4	2
8	1	3
9	2	3
A	3	3
B	4	3
C	1	4
D	2	4
E	3	4
F	4	4

Location 2

Prog Value	Zone 3	Zone 4
0	1	1
1	2	1
2	3	1
3	4	1
4	1	2
5	2	2
6	3	2
7	4	2
8	1	3
9	2	3
A	3	3
B	4	3
C	1	4
D	2	4
E	3	4
F	4	4

Location 3

Prog Value	Zone 5	Zone 6
0	1	1
1	2	1
2	3	1
3	4	1
4	1	2
5	2	2
6	3	2
7	4	2
8	1	3
9	2	3
A	3	3
B	4	3
C	1	4
D	2	4
E	3	4
F	4	4

Location 4

Prog Value	Zone 7	Zone 8
0	1	1
1	2	1
2	3	1
3	4	1
4	1	2
5	2	2
6	3	2
7	4	2
8	1	3
9	2	3
A	3	3
B	4	3
C	1	4
D	2	4
E	3	4
F	4	4

NB: Pulse counts are only selectable on zones programmed as instant alarm types, zone values 4 or E

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Question 52 (Pulse count time)
The Pulse count time is set between zero (0) seconds and ninety nine (99) seconds in 1 second increments

Location 1 = Seconds x 10
Location 2 = Seconds x 1

Location 1	Location 2	Time in seconds
0	1	1 second
0	2	2 seconds
0	3	3 seconds
0	4	4 seconds
0	5	5 seconds
1	0	10 seconds
2	0	20 seconds
3	0	30 seconds
4	0	40 seconds
5	0	50 seconds
9	9	99 seconds

QUESTION 53 (Zone response time)
This is a global timer, in which the zone must be violated for a minimum time as set below before an activation takes place

Q53 Location 1

0	0 to 20 ms
1	10 to 30 ms
2	20 to 40 ms
3	40 to 60 ms
4	60 to 80 ms
5	80 to 100 ms
6	100 to 120 ms
7	120 to 140ms
8	140 to 160 ms
9	160 to 180 ms
A	180 to 200 ms
B	200 to 220 ms
C	220 to 240 ms
D	240 to 260 ms
E	260 to 280 ms

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Question 53 (Dial in trigger outputs)

Q53 Location 2
Select trigger output for remote access key 7.
Q53 Location 3
Select trigger output for remote access key 8.
Q53 Location 4
Select trigger output for remote access key 9.

Program Value	Output Action
0	Disabled
1	Output 1 Timed
2	Output 1 Latched to GND
3	Output 1 Latched to 12V
4	Output 2 Timed
5	Output 2 Latched to GND
6	Output 2 Latched to 12V
7	Output 3 Timed
8	Output 3 Latched to GND
9	Output 3 Latched to 12V
A	Output 4 Timed
B	Output 4 Latched to GND
C	Output 4 Latched to 12V
D	Output 1 Toggle
E	Output 2 Toggle
F	Output 3 Toggle

Question 54 to 68 (Display User Codes)

User codes readable from the keypad in programming mode.

Question 54 = User Code 1

Question 55 = User Code 2

Question 56 = User Code 3

Question 57 = User Code 4

Question 68 = User Code 15

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Programming Sheets

Question #	Description	L1 Digit 1	L2 Digit 2	L3 Digit 3	L4 Digit 4	Default
○○○○○○○○ 0	Installer code					2580

Question #	Description	L1 Zone Type	L2 Report Code Digit 1	L3 Report Code Digit 2	L4 Select Output Action	Default
✦○○○○○○○ 1	Zone 1					1500
○✦○○○○○○ 2	Zone 2					3100
✦✦○○○○○○ 3	Zone 3					4100
○○✦○○○○○ 4	Zone 4					4100
✦○✦○○○○○ 5	Zone 5					4100
○✦✦○○○○○ 6	Zone 6					4100
✦✦✦○○○○○ 7	Zone 7					4100
○○○✦○○○○ 8	Zone 8					4100

Question #	Description	L1 Set Chime Zones 1 to 4	L2 Set Chime Zones 5 to 8	L3 Set Home Zones 1 to 4	L4 Set Home Zones 5 to 8	Default
✦○○✦○○○○ 9	Zone Options					0000

Question #	Description	L1 Fast Bypass	L2 Fast Arm	L3 Allow Zone Bypassing Zones 1 to 4	L4 Allow Zone Bypassing Zones 5 to 8	Default
○✦○✦○○○○ 10	Bypass & Arming Options					0000

Question #	Description	L1 Disarm	L2 RESERVED	L3 Zone Bypass	L4 RESERVED	Default
✦✦○✦○○○○ 11	Report Codes					4080

Question #	Description	L1 Quick Arm	L2 RESERVED	L3 Zone Restore	L4 RESERVED	Default
○○✦✦○○○○ 12	Report Codes					C0AA

Question #	Description	L1 Arm & Away	L2 RESERVED	L3 Arm & Home	L4 RESERVED	Default
✦○✦✦○○○○ 13	Report Codes					40D0

Question #	Description	L1 Panic input Digit 1	L2 Panic input Digit 2	L3 Tamper Input Digit 1	L4 Tamper Input Digit 2	Default
○✦✦✦○○○○ 14	Report Codes					4080

Question #	Description	L1 Auto-Test Digit 1	L2 Auto-Test Digit 2	L3 Auto-Arm Digit 1	L4 Auto-Arm Digit 2	Default
✦✦✦✦○○○○ 15	Report Codes					3050

Question #	Description	L1 Duress Digit 1	L2 Duress Digit 2	L3 Key Panic Digit 1	L4 Key Panic Digit 2	Default
○○○○✦○○○ 16	Report Codes					5040

Question #	Description	L1 Key Fire Digit 1	L2 Key Fire Digit 2	L3 Key Med Digit 1	L4 Key Med Digit 2	Default
✦○○○✦○○○ 17	Report Codes					2010

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Question #	Description	L1 AC Fail Digit 1	L2 AC Fail Digit 2	L3 AC Reset Digit 1	L4 AC Reset Digit 2	Default
○✦○○✦○○○ 18	Report Codes					10AA

Question #	Description	L1 Low Battery Digit 1	L2 Low Battery Digit 2	L3 Battery Restore Digit 1	L4 Battery Restore Digit 2	Default
✦✦○○✦○○○ 19	Report Codes					20AA

Question #	Description	L1 Key Tamper Digit 1	L2 Key Tamper Digit 2	L3 Siren Tamper Digit 1	L4 Siren Tamper Digit 2	Default
○○✦○✦○○○ 20	Report Codes					8001

Question #	Description	L1 Panic Input	L2 Tamper Input	L3 Siren Tamper	L4 Phone Line Fail	Default
✦○✦○✦○○○ 21	Output Action on Event					0000

Question #	Description	L1 Alarm Event	L2 Panic Key Event	L3 Medical Key Event	L4 Fire Key Event	Default
○✦✦○✦○○○ 22	Output Action on Event					0000

Question #	Description	L1 Duress Event	L2 Auto-Arm Event	L3 Key Tamper Event	L4 [#] Key Event	Default
✦✦✦○✦○○○ 23	Output Action on Event					0000

Question #	Description	L1 AC Fail Event	L2 AC Restore Event	L3 Low Battery Event	L4 Auto Test Event	Default
○○○✦✦○○○ 24	Output Action on Event					0000

Question #	Description	L1 Disarm Event	L2 Arm Event	L3 User 14 Code Event	L4 RESERVED	Default
✦○○✦✦○○○ 25	Output Action on Event					000F

Question #	Description	L1 Preset State of Outputs	L2 Panic Type	L3 Arm when faulted	L4 Tamper Type	Default
○✦○✦✦○○○ 26	Input & Output Options					0202

Question #	Description	L1 Output 1 Timer	L2 Output 2Ttimer	L3 Output 3 Timer	L4 Output 4 Timer	Default
✦✦○✦✦○○○ 27	Output Timers					0000

Question #	Description	L1 Primary Entry Delay	L2 Secondary Entry Delay	L3 Exit Delay	L4 Siren On Time	Default
○○✦✦✦○○○ 28	Timers					555C

Question #	Description	L1 Auto test delay	L2 Reporting Delay	L3 AC Fail/Restore	L4 Auto Re-arm	Default
✦○✦✦✦○○○ 29	Timers					0031

Question #	Description	L1 Hour x 10	L2 Hour x 1	L3 Minutes x 10	L4 Minutes x 1	Default
○✦✦✦✦○○○ 30	Auto test time					AAAA

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Question #	Description	L1 Hour x 10	L2 Hour x 1	L3 Minutes x 10	L4 Minutes x 1	Default
✦✦✦✦✦○○○ 31	Auto Arm time					AAAA

Question #	Description	L1 Keypad Options	L2 Siren Alert Options	L3 Key Tamper	L4 Restore Defaults	Default
○○○○○✦○○ 32	Audible & Keypad Options					1011

Question #	Description	L1 Batt Error Digit 1	L2 Batt Error Digit 2	L3 Siren Lockout Count	L4 Error Beep Enable	Default
✦○○○○✦○○ 33	Control Options					210F

Question #	Description	L1 Dial Types	L2 Dial Attempts	L3 Ring Count	L4 Tel Error time	Default
○✦○○○✦○○ 34	Dialler Options					0778

Question #	Description	L1 Primary Format	L2 Enable Serial TX	L3 Tel Fault Digit 1	L4 Tel Fault Digit 2	Default
✦✦○○○✦○○ 35	Dialler Options					2011

Question #	Description	L1 Tamper Zones 1 To 4	L2 Tamper Zones 4 To 8	L3 Tamper Reporting Digit 1	L4 Tamper Reporting Digit 2	Default
○○✦○○✦○○ 36	RESERVED					0080

Question #	Description	L1 Digit 1	L2 Digit 2	L3 Digit 3	L4 Digit 4	Default
✦○✦○○✦○○ 37	Primary Phone Number					FFFF

Question #	Description	L1 Digit 5	L2 Digit 6	L3 Digit 7	L4 Digit 8	Default
○✦✦○○✦○○ 38	Primary Phone Number					FFFF

Question #	Description	L1 Digit 9	L2 Digit 10	L3 Digit 11	L4 Digit 12	Default
✦✦✦○○✦○○ 39	Primary Phone Number					FFFF

Question #	Description	L1 Digit 13	L2 Digit 14	L3 Digit 15	L4 Digit 16	Default
○○○✦○✦○○ 40	Primary Phone Number					FFFF

Question #	Description	L1 Digit 1	L2 Digit 2	L3 Digit 3	L4 Digit 4	Default
✦○○✦○✦○○ 41	Secondary Phone Number					FFFF

Question #	Description	L1 Digit 5	L2 Digit 6	L3 Digit 7	L4 Digit 8	Default
○✦○✦○✦○○ 42	Secondary Phone Number					FFFF

Question #	Description	L1 Digit 9	L2 Digit 10	L3 Digit 11	L4 Digit 12	Default
✦✦○✦○✦○○ 43	Secondary Phone Number					FFFF

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Question #	Description	L1 Digit 13	L2 Digit 14	L3 Digit 15	L4 Digit 16	Default
○○✦✦○✦○○ 44	Secondary Phone Number					FFFF

Question #	Description	L1 RESERVED	L2 RESERVED	L3 RESERVED	L4 RESERVED	Default
✦○✦✦○✦○○ 45	RESERVED					FFFF

Question #	Description	L1 RESERVED	L2 RESERVED	L3 RESERVED	L4 RESERVED	Default
○✦✦✦○✦○○ 46	RESERVED					FFFF

Question #	Description	L1 RESERVED	L2 RESERVED	L3 RESERVED	L4 RESERVED	Default
✦✦✦✦○✦○○ 47	RESERVED					FFFF

Question #	Description	L1 RESERVED	L2 RESERVED	L3 RESERVED	L4 RESERVED	Default
○○○○✦✦○○ 48	RESERVED					FFFF

Question #	Description	L1 Digit 1	L2 Digit 2	L3 Digit 3	L4 Digit 4	Default
✦○○○✦✦○○ 49	Primary Account					1234

Question #	Description	L1 Digit 1	L2 Digit 2	L3 Digit 3	L4 Digit 4	Default
○✦○○✦✦○○ 50	Secondary Account					FFFF

Question #	Description	L1 Zone 1& 2	L2 Zone 3 & 4	L3 Zone 5 & 6	L4 Zone 7& 8	Default
✦✦✦✦○✦○○ 51	Pulse counts					0000

Question #	Description	L1 Seconds x 10	L2 Seconds x 1	L3 RESERVED	L4 RESERVED	Default
○○○○✦✦○○ 52	Pulse time					00AA

Question #	Description	L1 Seconds	L2 RemTtrigger 1	L3 Rem Trigger 2	L4 Rem Trigger 3	Default
✦○○○✦✦○○ 53	Response Time, Triggers					0000

Question #	Description	L1 Digit 1	L2 Digit 2	L3 Digit 3	L4 Digit 4	Default
○✦○○✦✦○○ 54- 58	Read only user codes					FFFF

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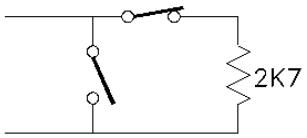
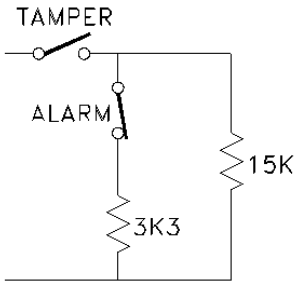
Wiring Specification:

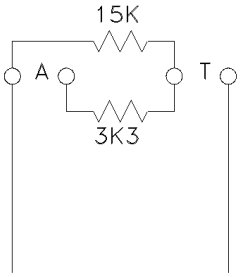
ZONE WIRING SINGLE END OF LINE



Normally open detectors are connected in parallel with the end of line resistor.
Normally closed detectors are connected in series with the end of line resistor.
A combination of n/o and n/c may be used

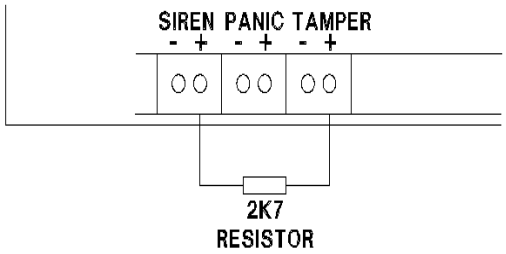
ZONE WIRING DUAL END OF LINE (TAMPER)





Only normally closed switches may be used in this configuration

SIREN TAMPER (short circuit)



NOTE:- The siren is tamper monitored for open circuit. To monitor for short circuit, the Tamper input must then be programmed as Tamper.
A 3k3 ohm resistor must be inserted between the Siren + and the Tamper +.

The Panic input must have a 2k7 ohm resistor connected irrespective of its programming.

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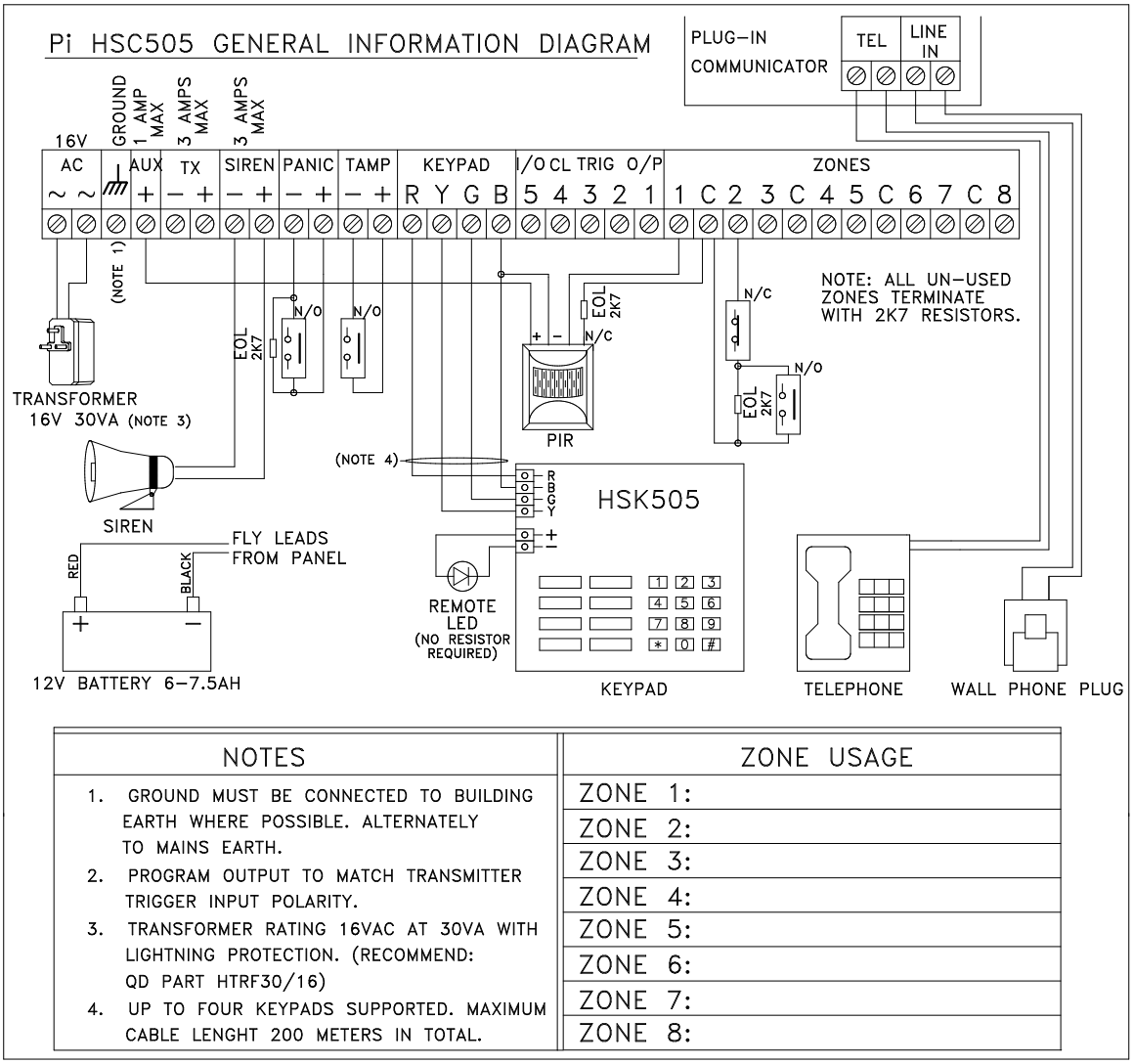

NOTES	ZONE USAGE
1. GROUND MUST BE CONNECTED TO BUILDING EARTH WHERE POSSIBLE. ALTERNATELY TO MAINS EARTH.	ZONE 1:
2. PROGRAM OUTPUT TO MATCH TRANSMITTER TRIGGER INPUT POLARITY.	ZONE 2:
3. TRANSFORMER RATING 16VAC AT 30VA WITH LIGHTNING PROTECTION. (RECOMMEND: QD PART HTRF30/16)	ZONE 3:
4. UP TO FOUR KEYPADS SUPPORTED. MAXIMUM CABLE LENGHT 200 METERS IN TOTAL.	ZONE 4:
	ZONE 5:
	ZONE 6:
	ZONE 7:
	ZONE 8:

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