Pi HSC505
Home Security Controller

User's Information Guide
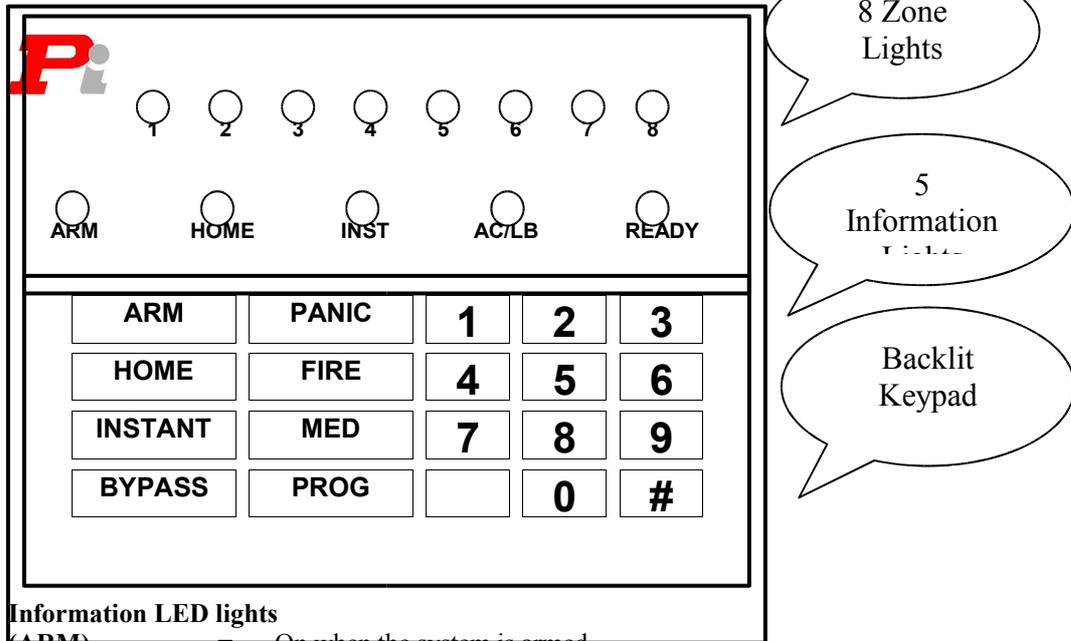# R2A

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.

8 Zone Lights

5 Information Lights

Backlit Keypad

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) = 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"
(AC/LB)
(READY)

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

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**

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)

ARM	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)

HOME	Press for 2 seconds and release
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. 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)

HOME	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.

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.

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.

Welcome mode (Normal)

| HOME | 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)

| INSTANT | 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)

BYPASS	Press for 2 seconds and release
4 Digit User Code	Enter your 4 digit user code
Zone Number	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.

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

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

| **4-Digit 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.

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.

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

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

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	LIGHT
[BYPASS]	[4]	(ZONE 4) Flashing

Clear Zone Bypass Quick mode active

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

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

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	