

## Contents

# AP816

## User Manual

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**1. Introduction to the AP 816**

The AP816 is a versatile microprocessor based, eight zone alarm panel. It provides for two partitions and can be expanded to sixteen zones. Since most features are programmable, please check with your installer as to which options have been enabled. There are eight programmable burglary zones, a monitored siren, auxiliary power and five programmable outputs which may be programmed to perform various trigger/switching functions.

For correct operation the AP816 must be used with the specified transformer/battery combination and appropriate peripheral sensors and signalling devices.

**2. Understanding the Keypad Indicators**

Refer to the illustration on the inside front cover of this manual.

**2.1 ARMED Indicator (Red)**

Illuminated	System Armed
Extinguished	System Disarmed
Flashing	Alarm Condition or Memory

**2.2 AWAY Indicator (Red)**

Illuminated	System Armed in Away Mode
Extinguished	System Disarmed / Armed in Stay Mode

**2.3 POWER Indicator (Red)**

Illuminated	Mains Power is present
Flashing	Trouble Condition

**2.4 READY Indicator (Green)**

Illuminated	System is ready to be armed
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## 2.5 ZONE Indicators (Yellow)

Illuminated	Zone bypassed
Extinguished	Zone clear
Flashing	Zone violated or tampered

## 2.6 The Keypad Buzzer

The AP816 keypad includes a buzzer which is used for audible signaling and verification of certain keypad functions. There are 4 possible volume settings : loud, medium, soft and silent. The default value being loud. To program the keypad volume use the following table.

Key Entry	Keypad Buzzer Options
[ # ] + [ 3 ]	Loud
[ # ] + [ 2 ]	Medium
[ # ] + [ 1 ]	Soft
[ # ] + [ 0 ]	Silent

To change the the volume (for this example to soft) press the [ # ] and [ 1 ] key simultaneously for 2 seconds (long press). After a 2 second time lapse, the keypad will respond with a beep at the new volume setting. For the silent setting no response will be heard. This is a keypad specific setting.

All zones programmed as Chime or Buzz Zones, will sound with a loud buzz regardless of the keypad volume set above.

## 3. Programmable Functions

Functions include:

- Quick Away Arm
- Quick Stay Arm
- Arm with Entry/Exit or Follower Zones Violated
- Stay Arm
- Stay Arm and Go

- Forced Arm
- Push to Arm
- Siren Sound on Arm/Disarm (single toot - arm / double toot - disarm)
- Panic Alarm
- Fire Alarm
- Chime Zones
- Buzz Zones
- Zone Tamper
- Arm with Key-Switch or Remote Control

## 4. Arming the Control Panel

### 4.1 Away Arming

#### How to Away Arm

[#] + [USER CODE]  
(Leave via Entry Exit Zone)

1. Ensure that the READY indicator is illuminated. If not check that all protected doors and windows are closed and that all movement has ceased in areas covered by motion detectors. If necessary, close the front door.
2. Press the [#] key.
3. Enter a valid [USER CODE]. If an incorrect code is entered the keypad buzzer will beep three times. In the event of an error press the [#] key and re-enter the code.
4. The ARMED indicator will illuminate and the keypad buzzer will sound for the duration of the exit delay. Any bypassed zones will be indicated by a steady illuminated zone indicator.
5. Leave only via a designated exit route. The panel will arm at the end of the exit delay.

#### Quick Away Arm - Shortcut Key

(Hold down the [1] key until the keypad buzzer sounds)

If this function is enabled, it is possible to AWAY arm by simply holding down the [1] key until the keypad buzzer sounds and the arming process begins.

Note: If the partition is already STAY armed this key will initialise AWAY arming. It is therefore possible to change directly from STAY armed to AWAY armed.

#### 4.2 Stay Arming

Stay arming allows the user to monitor selected perimeter zones and bypass interior zones. The user can remain on the premises with access to designated areas during the STAY ARM cycle. Any zone which may be violated accidentally should be programmed as a buzz zone. When violated a buzz zone will cause the keypad buzzer to sound for thirty (30) seconds before sounding the siren. Entering a valid User Code before the siren sounds will silence the keypad buzzer and prevent the siren from sounding.

To provide greater flexibility the panel caters for the programming of two (2) different STAY PROFILES. Each STAY PROFILE contains a unique combination of STAY, BUZZ and ALARM zones which cater for a particular STAY ARM requirement.

**Example :** PROFILE 1 might be used when the family goes to bed in the evening. In this profile some interior zones may be programmed as alarm zones or buzz zones, whereas PROFILE 2 is utilized while watching television when all interior zones would be bypassed. (See 10.1 How to Select a Stay Profile.)

#### How to Stay Arm

**[#] + [USER CODE]**

(Do not leave premises)

1. Select the required STAY PROFILE. (See Section 10.1)
2. Ensure that the READY indicator is illuminated. If not, check that all protected doors and windows are closed and that all movement has ceased in the areas covered by motion detectors.
3. Press the [#] key.
4. Enter a valid [USER CODE]. If an incorrect code is entered the keypad will give an error beep. In the event of an error press the [#] key and re-enter the [USER CODE].
5. DO NOT violate the entry exit zone (normally the front door). If the

- entry exit zone is violated the system will arm in the AWAY mode.
6. The ARMED indicator will illuminate and the keypad buzzer will sound for the duration of the exit delay.
7. Upon expiry of the exit delay, the AWAY indicator will remain extinguished.
8. Any STAY zones will be automatically bypassed (indicated by a steadily illuminated indicator).
9. Ensure that you enter only those areas that are bypassed.

#### Quick Stay Arm - Shortcut Key

(hold down the [5] key for 2 seconds until the keypad buzzer sounds)

It is possible to STAY arm by holding down the [5] key until the keypad buzzer sounds. The panel will immediately arm into the stay mode without any exit delay.

#### 4.3 How to Stay Arm and Go

(Hold down the [6] key for two seconds until the keypad buzzer sounds)

This is a single key arm function which allows the user to STAY arm and leave the premises.

If a partition is already stay armed, holding down the 6 key initiates an exit delay, thus allowing the user to leave the premises without disarming. At the end of the exit delay the partition will re-arm in the same stay profile it was armed in before the 6 key was held down.

1. Hold down the [6] key until the keypad buzzer sounds. The keypad buzzer will sound for the duration of the exit delay. Only leave via a designated exit route.
2. At the end of the exit delay the ARMED indicator will illuminate and the AWAY indicator will remain extinguished. All stay zones will be bypassed.

#### 4.4 Key-Switch or Remote Arming (If fitted)

1. Ensure that the READY indicator is illuminated before leaving.
2. Leave and close the door (remembering to lock!)
3. Activate the remote or the key-switch. A remote can be used to Stay Arm or Away Arm.
4. The alarm will arm in the away mode.

Note: If a remote control is used it is advisable to have the siren

toot on arm function enabled. This provides verification that the system has armed.

#### 4.5 Auto Arming

The panel may be programmed to arm automatically at a pre-programmed time. Should the premises be occupied at the time of auto-arming, a valid **[USER CODE]** entered during the pre-arm delay will terminate the arming sequence. The pre-arm delay is signalled by an exit beep.

### 5. Disarming the Control Panel

#### 5.1 How to Disarm with a User Code

**[#] + [USER CODE]**

To disarm the system, enter **[#]** followed by a valid **[USER CODE]**.

1. Enter the premises through a designated entry route. Entering via any other route will cause an alarm.
2. As soon as the entry exit zone is violated the entry delay will begin. The keypad buzzer will sound for the duration of the entry period.
3. Press the **[#]** key and enter a valid **[USER CODE]**.
4. Once the system disarms, the ARMED indicator will extinguish and the keypad buzzer will stop sounding.
5. If no valid user code has been entered prior to the expiry of the entry delay period an alarm condition will be registered.
6. If the entry period is too short, have your installer change the entry delay period.

Note: If a strobe (or flashing light) has been installed and an alarm condition is registered, the strobe will continue flashing after the siren has stopped sounding. Entering a valid **[USER CODE]** will cancel the strobe.

#### 5.2 How to Disarm using a Key-Switch or Remote

1. Activate the remote or keyswitch.
2. The system will disarm and the remote indicator (if installed) will

extinguish. If the siren toot on disarm option is enabled, the siren will provide a double toot when the panel is disarmed,

### 6. Bypassing Zones

The term BYPASS is used to describe a zone which has been deactivated; i.e. violation of a bypassed zone is ignored and will not cause an alarm condition.

Once the system is armed it is not possible to bypass zones. All bypassed zones will be automatically cancelled each time the panel is disarmed and must be re-bypassed before the next arming.

#### 6.1 How to Bypass a Zone

Hold down **[9] + [ZONE NUMBER] + [\*] + [#]**

1. To enter bypass mode, hold down the **[9]** key for two seconds until the keypad buzzer sounds. The Away LED will flash, and all other LEDs will be extinguished.
2. Ensure that the panel is not armed. Press the number corresponding to the zone you need to bypass e.g. the **[2]** key if you wish to bypass zone 2, then press the **[\*]** key.
3. The relevant zone indicator will illuminate to indicate that the zone is now bypassed.
4. Repeat step 2 to bypass other zones.
5. Press the **[#]** key to exit the bypass mode.

Note: Panic Zones cannot be bypassed

#### 6.2 How to Un-Bypass a Zone

Hold down **[9] + [ZONE NUMBER] + [\*] + [#]**

1. Bypassed zones are shown by (constantly) illuminated zone LEDs.
2. Enter bypass mode by holding down the **[9]** key until the keypad buzzer sounds. The away indicator will flash and the power, ready and armed LEDs will be extinguished.
3. Press the number corresponding to the currently bypassed zone, then press the **[\*]** key.

4. The zone indicator will extinguish - the zone is now active.
5. Press the [#] key to exit the bypass mode.

## 7. Emergency Alarms

### 7.1 Fire Alarms

**[F]**

(Hold down the [F] key for two seconds until the keypad buzzer sounds)

If the [F] key is pressed until the keypad beeps (approximately 2 seconds) a FIRE ALARM condition will be activated. The FIRE ALARM CONDITION may also be triggered by a smoke detector connected to an appropriately programmed zone. The siren will sound on and off repeatedly if programmed and the FIRE REPORTING CODE will be transmitted to the monitoring company. To silence the siren enter a valid [USER CODE].

### 7.2 Panic Alarms

**[P]**

(Hold down the [P] key for two seconds until the keypad buzzer sounds)

If the [P] key is pressed until the keypad beeps (approximately 2 seconds) a PANIC ALARM condition will be activated. A PANIC ALARM may also be activated using any FIXED PANIC button or a REMOTE PANIC button (if installed). If the audible panic option has been selected, the siren will sound. A PANIC ALARM will be transmitted to the monitoring company. To silence the siren, enter a valid [USER CODE]. Press the [P] key only in an emergency situation which requires response by emergency personnel.

### 7.3 Medical Alarms

**[M]**

(Hold down the [M] key for two seconds until the keypad buzzer sounds)

If the [M] key is pressed until the keypad beeps (approximately 2

seconds) a MEDICAL ALARM condition will be activated. The keypad buzzer will beep 5 times. A medical reporting code will be reported to the monitoring company.

### 7.4 Duress Alarms

**[#] + [DURESS CODE]**

This is a special user code which should only be used in the unique situation where an intruder forces one to disarm the system (under duress). When a [DURESS CODE] is entered, the control panel disarms. Normally however a Duress Alarm Code (if programmed) will be reported to the monitoring company. It is advisable to choose a Duress code which can be easily remembered by all family (or staff) members.

## 8. Alarm Memory

The Alarm Memory displays any zones which were violated or bypassed during the last arm cycle. A flashing ARMED indicator notifies the user of an alarm memory condition. To view the alarm memory disarm the panel and continue as follows:

**[0]**

(Hold down the [0] key for two seconds until the keypad buzzer sounds)

1. Hold down [0] until the keypad buzzer sounds.
2. The READY and POWER indicators will extinguish and the keypad buzzer will sound briefly.
3. Illuminated zone indicators show which zones were violated during the last armed period.
4. Press 2 to display zones which were bypassed.
5. Press 3 to display which zones were tampered.
6. Press 1 to return to violated zones.
7. The alarm memory is erased at the beginning of each arm cycle.

## 9. User Codes

The AP 816 Alarm Panel has 32 programmable user codes. By default user code 1 is the Master User Code which contains a pre-programmed 4 digit code of 1234 .

The alarm panel may have been programmed by your installer to have 1 or 2 partitions. A partition is a group of zones which may be armed and disarmed independantly without affecting zones or users assigned to other partitions.

i.e. a guest cottage appended to a main house may be partition 2. The main house being partition 1 .

\* Note : User codes may be 4 (default) or 6 digits long. This is a programmable feature Check with your installer to verify which option has been programmed.

### 9.1 Adding, Deleting and Editing User codes

Hold [\*] + [MASTER USER CODE] + [\*] + [PROGRAMMABLE OPTION]

The AP 816 utilizes a user friendly programmable interface which allows the user to add, modify or delete user codes. See Table 1 for a summary of programmable options. The programmable interface is accessed by entering the **USER PROGRAMMING MODE**.

Table 1. User Programming Options

Options	Summary of Programmable Options
Option 0	Allows for the addition of new user codes.
Option 1	Allows editing of the user name displayed by LCD keypads. This menu is only applicable if LCD keypads are installed.
Option 2	Allows editing of a selected user code. Note that the user code properties are not edited, only the user code itself.
Option 3	Allows viewing of the user code slot number for a selected code. There are 32 available user code slots.
Option 4	Allows editing of the user code properties for a selected user code. This is a bit mapped menu.
Option 5	Allows the allocation of a selected user code to a designated partition(s). This is a bitmapped menu.
Option 8	Adding User Remotes
Option 9	Deleting a User Code
Option 10	Allows the deletion of a user code using the user code slot number.
Option 11	Allows viewing of a user name if the slot number is known.

### 9.2 How to Enter the User Program Mode

1. Ensure that the panel is not armed.
2. Hold down the [\*] key until the keypad buzzer sounds.
3. The ARMED and READY indicators will flash alternately.
4. Enter a [MASTER USER CODE]. The factory default is [1234]. Should the [MASTER USER CODE] be defaulted to six digits, it will be [123456]. Press the [\*] key. A valid entry will be confirmed by a long beep.
5. If steps 1 -4 are performed correctly, the READY indicator will flash. If an invalid code was entered the keypad buzzer will give an error beep. (3 short beeps). If the error beep occurs, press the [#] key (this clears all previous entries) and repeat steps 2 - 5.
6. Select a programmable option from Table 1 above.

**Example:** To add a new user code, enter User Program Mode by completing steps 2 - 6 as listed above. To access Option 0 enter a value of [0] (See table 1) followed by [\*]. Enter a [NEW USER CODE] followed by the [\*] key. Once the user code is programmed enter the next code followed by [\*]. To exit the program mode press the [#] key.

For a full list of options refer to Table 1. Programming of these options is explained below.

### 9.3 Explanation of Programmable Options

#### 9.3.1 Option 0 Add a New User Code

Hold [\*] + [Master Code] + [\*] + [0] + [\*] + [New Code] + [\*]

1. Enter the User Program Mode as per steps 1 - 4 of (9.2).
2. Press the [0] key followed by the [\*] key to select the programmable option 0. The Ready and Armed indicators will flash simultaneously.
3. Enter the [NEW USER CODE] followed by the [\*] key.
4. Further codes may be added by repeating step 3 above.
5. After entering the last code press the [#] key to exit the user program mode.
6. When a new user code is added, it is stored in the first available user slot.

#### 9.3.2 Option 1 Edit a User Name (LCD Keypads only)

Hold [\*] + [Master Code] + [\*] + [1] + [User Code] + [\*]

1. Enter the User Program Mode as per steps 1 - 4 of (9.2).
2. Press the [1] key followed by the [\*] key to select programmable option 1. The Armed indicator will flash.
3. Enter the [USER CODE] of the User whose name you wish to edit.
4. User Names are displayed as the User Slot Number by default. Edit the **User Number** so that it reads the correct User Name. To confirm the entry press [\*]. The [MODE] key can be used to move the cursor to the right, whilst the [F] key can be used to move from right to left.
5. Further codes may be edited by repeating steps 3 - 4 above.

#### 9.3.3 Option 2 Edit a Selected User Code

Hold [\*] + [Master Code] + [\*] + [2] + [\*] + [Old Code] + [\*] + [New Code] + [\*]

1. Enter the User Program Mode as per steps 1 - 4 of (9.2).
2. Press the [2] key followed by the [\*] key to select programmable option 2. The READY and Armed indicators will flash simultaneously.
3. Enter the [USER CODE] which is to be edited followed by the [\*] key.
4. The READY indicator will flash and the AWAY indicator will be illuminated.
5. Enter the [NEW CODE] followed by the [\*] key.
6. The READY and ARMED indicators will flash simultaneously.
7. To edit other codes repeat steps 3-5.
8. Press the [#] key to exit the User Program Mode.

#### 9.3.4 Option 3 View a User Code Slot Number

Hold [\*] + [Master Code] + [\*] + [3] + [\*] + [User Code] + [\*]

1. Enter the User Program Mode as per steps 1 - 4 of (9.2).
2. Press the [3] key followed by the [\*] key to select programmable option 3. The READY and ARMED indicators will flash simultaneously.
3. Enter the [User Code] followed by the [\*] key.
4. The READY indicator will flash and the AWAY indicator will be illuminated.
5. The [USER CODE] slot number will be displayed by the Zone indicators. [See table 2]
6. Press the [#] key to exit the User Program Mode.

**Reading Zone Indicators:**

Reading of the value as indicated by the Zone LEDís is achieved by summing the numbers as represented by the zone indicators. The representative value of each zone indicator is shown in Table 2 below.

Table 2. Values Represented by Each Zone Indicator

single units		10's of units	
Zone 1	1	Zone 5	1
Zone 2	2	Zone 6	2
Zone 3	4	Zone 7	4
Zone 4	8	Zone 8	8

Values shown by indicators are indicative of single unit values, whilst values shown by Zones 5 - 8 are indicative of tens of units.

**Example:** Assume zone indicators 1, 2 and 5 are illuminated. Units are represented by the sum of Zone 1 and Zone 2 (i.e. 1 + 2) and tens of units are represented by the value of Zone 5 (i.e. 1) Thus the value indicated by the illuminated LED will be as shown as in the example below:

single units		10's of units	
Zone 1	1	Zone 5	1
Zone 2	2		
Sum of Zone LED Indicators	3	Sum of Zone LED Indicators	1

Thus the value of the illuminated zones is 13.

**9.3.5 Option 4 User Code Properties**

Press [\*] + [Master Code] + [\*] + [4] + [\*] + [User Code ] + [\*] + [PROPERTY NUMBER]+ [\*]

1. Enter the User Program Mode as per steps 1 - 4 of (Section 9.2)

2. Press the [4] key followed by the [\*] key to select programmable option 4. The READY and ARMED indicators will flash simultaneously.
3. Enter the [USER CODE] followed by the [\*] key.
4. The READY indicator will flash and the AWAY indicator will be illuminated.
5. The properties assigned to the [USER CODE] are displayed by the Zone indicators. An illuminated LED(s) indicates that certain property(ies) have been assigned to the USER CODE. Refer to Table 4 for a list of USER CODE properties.
6. To select a user code property, press the key which corresponds to that property followed by the [\*] key. The appropriate zone LED will illuminate. To deselect a property, press the corresponding key followed by the [\*] key and the LED will be extinguished.

**Example:** To enable a User Code to function as a duress code press the [2] key followed by the [\*] key. The zone 2 LED will illuminate to confirm the selection.

7. Repeat step 6 until the desired properties have been programmed.
8. Press the [#] key to exit the User Program Mode.

Table 3. User Code Properties

Zone LED	Property
2	Duress Code
3	Arm to Disarm Code [Maids Code]
4	Global Arm / Disarm Code

**Explanation of User Code Properties**

**9.3.5.1 Duress Code**

This is a special 4 (default) or 6 digit user code (check the code length with your installer) which should only be used in the unique situation where an intruder forces one to disarm the system (under duress). When the [DURESS CODE] is entered, the control panel disarms

normally - however a DURESS REPORTING CODE is transmitted to the monitoring company to inform them that you have been forced to disarm the control panel by an intruder.

It is advisable to choose a code that can be easily remembered by all family (or staff) members.

### 9.3.5.2 Maids Code

This code may be used to limit access to the premises. The Maids code will only disarm the system if the same code was used for arming. If armed with a code other than this code, the system will view an attempt to disarm using the Maids code as an invalid entry. Any valid user code will disarm the system if it has been armed with the Maids code.

### 9.3.5.3 Global Arm / Disarm Code

This code when entered will either arm or disarm the partitions assigned to that user depending on their status. If both partitions are disarmed, entering a global code will arm both partitions. If both partitions are armed, entering a global code will disarm them. In the case where one partition is armed and the other disarmed entering a global code at the keypad of the armed partition will disarm that partition and entering a global code at the keypad of the disarmed partition will arm that partition.

### 9.3.6 Option 5 Assign User Code to Partitions

1. Enter the User Program Mode as per steps 1 - 4 of (9.2).
2. Press the **[5]** key followed by the **[\*]** key to select programmable option 5. The READY and ARMED LEDs will flash simultaneously.
3. Enter the **[USER CODE]** followed by the **[\*]** key.
4. The READY indicator will flash and the AWAY indicator will be illuminated.
5. The partitions to which the **[USER CODE]** is assigned are displayed by the by the zone LEDs. If zone LED 1 is illuminated the User Code can arm or disarm partition 1. If zone LED 2 is illuminated, the User Code can arm or disarm partition 2. It is possible to program codes to arm / disarm both partitions.

6. To select which partitions the **[USER CODE]** may arm or disarm, toggle zone LEDs by entering the **[ZONE LED NUMBER]** followed by the **[\*]** key.
7. Repeat step 6 until the User Code has been assigned to the correct partition/s.
8. Press the **[#]** key to exit User Program Mode.

### 9.3.7 Option 8 Adding User Remotes

1. Enter the User Program Mode as per steps 1 - 4 of (9.2).
2. Press the **[8]** key followed by the **[\*]** key to select programmable option 8. The READY and ARMED LEDs will flash simultaneously.
3. Enter the **[USER CODE]** followed by the **[\*]** key.
4. The READY indicator will flash and the AWAY indicator will be illuminated.
5. Press any button on the new remote. This will assign the new remote to the user code as entered in Step 3.
6. To add additional remotes, repeat steps 3 - 5.
7. Press the **[#]** key to exit User Program Mode.

### 9.3.8 Option 9 Delete User Code (Code known)

1. Enter the User Program Mode as per steps 1 - 4 of (9.2).
2. Press the **[9]** key followed by the **[\*]** key to select Menu option 9. The READY and ARMED indicators will flash simultaneously.
3. Enter the **[USER CODE]** to be deleted followed by the **[\*]** key. Deleting the code in slot one will reprogram it to 1234
4. Further codes may be deleted by repeating Step 3 above.
5. After deleting the final code press the **[#]** key to exit User Program Mode.

### 9.3.9 Option 10 Delete a User Code ("Slot" known)

1. Enter the User Program Mode as per steps 1 - 4 of (9.2).
2. Press the **[1]** key then the **[0]** key followed by the **[\*]** key. The ARMED and READY indicators will flash

- simultaneously.
3. Enter the **[SLOT NUMBER]** for the User Code you wish to delete followed by the **[\*]** key. You can determine the slot number of a particular code by using programmable option 3.
  4. Further User Codes may be deleted by repeating Step 3.
  5. After deleting the final code, press the **[#]** key to exit User Program Mode.

### 9.3.10 Option 11 Viewing a User Name (Slot Known - LCD Keypad only)

1. Enter the User Program Mode as per steps 1 - 4 of (9.2).
2. Press the **[1]** key then the **[1]** key followed by the **[\*]** key.
3. Enter the **[SLOT NUMBER]** followed by the **[\*]** key.
4. The USER NAME will be displayed. Default names are displayed as the SLOT NUMBER (i.e. If the SLOT NUMBER has not been edited as per Option 1)
5. Press **[#]** to exit User Program Mode.

## 10. "Stay Zones"

Stay zones are those zones which are bypassed automatically when the system is in STAY ARMED. To avoid triggering the alarm, zones such as bedrooms which are protected by Passive Infra-Red (PIR) detectors or windows which may be opened, must be bypassed when staying at home. Stay zones need only be programmed once. Each time the system is armed in the Stay Mode the pre-selected stay zones will be bypassed automatically. The panel allows for two unique STAY PROFILES to be stored. A STAY PROFILE stores a pre-selected combination of STAY and BUZZ zones to suit a specific STAY ARM requirement. If a partition is stay armed using Profile one, it is possible to toggle the panel arm status directly to stay arm profile 2 by holding the **[5]** key for two seconds. STAY and BUZZ zones can be programmed for each profile once the profile has been selected. See section 10 and 11.

### 10.1 How to Select a Stay Profile

**[#] + [MODE] + [2] + [\*] + [PROFILE NUMBER] + [\*]**

1. Press the **[#]** key to clear any previous entries.
2. Hold **[MODE]** down for one second until the keypad beeps.
3. Press the **[2]** key followed by the **[\*]** key.
4. Press **[1]** or **[2]** for the required profile.
5. Press **[\*]** to enter. The buzzer will give a long beep.
6. Program STAY and BUZZ zones for the profile or ARM the profile (See sections 10 and 11).

### 10.2 How to Program Stay Zones

**[3] + [ZONE NUMBER] + [\*] + [#]**

1. Select the required stay profile (See 10.1)
2. Hold down the **[3]** key until the keypad buzzer sounds. The AWAY indicator will flash indicating that the panel is in the Stay Zone programming mode.
3. Press the **[NUMBER]** corresponding to the zone you wish to be a STAY zone followed by the **[\*]** key.
4. The relevant zone indicator will illuminate.

Note: Buzz zones will be shown by flashing indicators. (See Section 11). A Buzz zone cannot be selected as a Stay Zone. The Buzz status must be cleared first.

5. Repeat step 3 until the selection of stay zones is completed.
6. Press the **[#]** key to exit the stay zone programming mode.

### 10.3 How to Cancel Stay Zones

**[3] + [ZONE NUMBER] + [\*] + [#]**

1. Select the required Stay Profile (See 10.1)
2. Hold down the **[3]** key until the keypad buzzer sounds. The AWAY indicator will flash to show that the panel is in the Stay Zone programming mode.
3. Press the **[NUMBER]** corresponding to the STAY zone you wish to cancel followed by the **[\*]** key.

4. The relevant zone indicator will extinguish.
5. Press the **[#]** key to exit the stay zone programming mode.

## 11. Buzz Zones

Violation of a buzz zone when Stay Armed will cause the keypad buzzer to sound for a period of 30 seconds during which time a valid user code must be entered. If a valid user code is not entered during this period the system will register an alarm condition. This feature helps prevent unnecessary false alarms.

**Note:** If an entry / exit zone is programmed as a buzz zone, violation of the entry / exit zone ( when the panel is Stay Armed) will cause the keypad buzzer to sound for the duration of the entry delay time. This, if the panel is stay armed, allows the user to enter the premises and disarm the panel.

If it is not programmed as a buzz zone, the alarm will be triggered immediately. If the panel was armed using the **[6]** key (Stay Arm and Go) violation of the entry / exit zone will always start the entry / exit delay.

### 11.1 How to Program a Buzz Zone

**[4] + [ZONE NUMBER] + [\*] + [#]**

1. Select the required Stay Profile. (See 10.1)
2. Hold down the **[4]** key until the keypad buzzer sounds. The AWAY indicator will flash to show that the panel is ready to program buzz zones.
3. Press the **[NUMBER]** corresponding to the zone you wish to be a Buzz zone followed by the **[\*]** key.
4. The relevant Buzz zone will be shown by the illuminated zone indicator. Stay zones will be shown by flashing indicators. A Stay zone cannot be selected as a Buzz zone; the Stay status must be cleared first.
5. Repeat step 3 until all the required Buzz zones are programmed.
6. Press the **[#]** key to exit the buzz programming mode.

### 11.2 How to Cancel a Buzz Zone

**[4] + [ZONE NUMBER] + [\*] + [#]**

1. Select the required Stay Profile. (See 10.1)
2. Hold down the **[4]** key until the keypad buzzer sounds. The AWAY indicator will flash.
3. Press the **[NUMBER]** corresponding to the BUZZ zone you wish to cancel followed by the **[\*]** key.
4. The relevant zone indicator will extinguish.
5. Press the **[#]** key to exit the buzz zone programming mode.

## 12. Chime Zones

The chime mode allows the user to monitor nominated zones while the system is disarmed. The keypad buzzer will sound briefly when the nominated zone is violated - the siren will NOT sound and no alarm condition will be reported.

**EXAMPLE:** If you wish to know each time someone enters or exits the front door of your office program this zone as a chime zone, the keypad will beep each time someone opens the front door.

### 12.1 How to Program Chime Zones

**[2] + [ZONE NUMBER] + [\*] + [#]**

1. Hold down the **[2]** key until the keypad buzzer sounds.
2. The AWAY indicator will flash.
3. To program a zone as a chime zone, press the key corresponding to that zone followed by the **[\*]** key. The zone indicator will illuminate.
4. Program any other zones you wish to select as chime zones as per step 3.
5. Press the **[#]** key to exit the chime programming mode.

## 12.2 How to Cancel Chime Zones

[2] + [ZONE NUMBER] + [\*] + [#]

1. Hold down the [2] key until the keypad buzzer sounds.
2. The AWAY indicator will flash.
3. To cancel any chime zones, press the key corresponding to that zone followed by the [\*] key. The zone indicator will extinguish.
4. Press the [#] key to exit the chime programming mode.

## 13. Viewing Trouble Conditions

(Hold down the [7] key for two seconds until the keypad buzzer sounds)

The user is alerted to a trouble condition via a flashing power LED. It is also possible to enable a trouble beep. If the trouble beep has been enabled, the keypad buzzer will sound to alert the user that a trouble condition has occurred. Press the [#] key to silence the buzzer. Hold down the [7] key for two seconds. The ARMED, AWAY and READY indicators will flashing simultaneously showing that the keypad is in the TROUBLE VIEW MODE. Refer to the table 5 below to find the significance of each illuminated zone LED. The system will automatically exit the TROUBLE VIEWING MODE after one minute. Alternately to exit this mode press [#].

Note: Certain trouble conditions will only clear once the trouble condition has restored. To cancel the beeping without viewing the trouble conditions, press [#] key.

Table 4 Trouble Conditions

Indicator	Trouble Condition
1	AC Mains Failure
2	Failure to communicate successfully to monitoring company
3	Phone line trouble
4	Siren tamper
5	Low battery
6	Loss of Clock Timer
7	Engineer Reset
8	Box tamper
9	n/a
10	Tamper on peripheral device
11	Communication loss to peripheral device
12	Loss of power to peripheral devices

## 14. Changing a Partition

To change partitions the keypad must be a global keypad.

1. Hold [MODE] until the keypad beeps.
2. Press [1][\*] followed by the [partition number][\*].

If no key is pressed on the keypad for 20 seconds, it will beep and default back to its original partition. The keypads may be programmed to remain in the new partition.

On the AP 816 Alarm Panel:

[PARTITION] limited to 1 or 2  
 [ZONE] limited to 1 - 16  
 [OUTPUT] limited to 1 - 7

Any value outside of these constraints will result in a key entry error occurring.

## 15. Remote Telephone Access

Please note that this section is only relevant if programmed by your installer.

The AP 816 Alarm Panel has a secure, remote telephone interface which allows a user to arm/disarm, to bypass/unbypass zones and to set programmable outputs via a phone line. A user accesses the remote dial-in interface by dialling the alarm panel using a DTMF phone. This programmable function is only available if enabled by your installer.

To access the remote dial-in interface, dial the alarm panel and wait the number of rings programmed (the default number of rings being 15). If the fax defeat function has been enabled, dial the panel and hang up after one ring. Dial in again within 1 minute, the panel will pickup immediately and transmit handshake tones consisting of a high pitch tone for two seconds followed by a lower pitch tone for one second.

Within twenty seconds of the panel transmitting the handshake tones, enter a valid user code on the DTMF enabled phone. If a user code is not entered or if the user code is invalid - the panel will release the line. If the user code is valid and telephone access has been enabled, the panel will give a single confirmation beep indicating that the user has gained access to the remote interface. If no key-presses are detected for twenty seconds once access has been gained to the remote interface the panel will release the line.

Should the panel be programmed to report to your cellular telephone, entering the user code in the delay between beeps will also allow access to the remote telephone interface.

If the phone in access has been setup to arm/disarm only, pressing the number of the partition allows the user to toggle the panels arm status.

A single beep indicates that the partition has armed, a double beep indicates that the partition has disarmed. 3 beeps indicates that the partition is not ready to arm.

Table 5. Remote Telephone Operation

Operation	Key Entry	Panel Response
Arm a Partition	[1] [1] [PARTITION] [*]	A Single Confirmation Beep indicates Partition armed successfully Three Error Beeps indicates Partition cannot be armed by user code or Partition not ready to be armed or a key entry error has occurred
Disarm a Partition	[1] [2] [PARTITION] [*]	A Single Confirmation Beep indicates Partition disarmed successfully Three Error Beeps indicates Partition cannot be disarmed by user code or a key entry error has occurred
Check Arm Status (By Partition)	[1] [3] [PARTITION] [*]	A Single Beep indicates Partition is Armed A Double Beep indicates partition is Disarmed Three Error Beeps indicates a key entry error
Bypass a Zone	[2] [1] [ZONE] [*]	A Single Confirmation Beep indicates that the zone was successfully bypassed Three Error Beeps indicates that the zone cannot be bypassed or a key entry error has occurred
Un-Bypass a Zone	[2] [2] [ZONE] [*]	A Single Confirmation Beep indicates that the zone was successfully unbypassed Three Error Beeps indicates that a key entry error has occurred
Check Zone Bypass Status	[2] [3] [ZONE] [*]	A Single Beep indicates that the zone is bypassed A Double Beep indicates that the zone is unbypassed Three Error Beeps indicates that a key entry error has occurred
Set Programmable Output	[3] [1] [OUTPUT] [*]	A Single Confirmation Beep indicates that the programmable output was set Three Error Beeps indicates that a key entry error has occurred
Clear Programmable Output	[3] [2] [OUTPUT] [*]	A Single Confirmation Beep indicates that the programmable output is clear Three Error Beeps indicates that a key entry error has occurred
Test Programmable Output Status	[3] [3] [OUTPUT] [*]	A single Beep indicates that the programmable output is set A Double Beep indicates that the programmable output is clear Three Error Beeps indicates that a key entry error has occurred
Hang-Up	[0]	Telephone Line Released Three Error Beeps indicates that a key entry error has occurred

## 16. Output Control via a Keypad

If the panel has been setup to control switching functions via its outputs, these can be controlled via the keypad - e.g. turning lights on and off.

Hold down the **[MODE]** key and press **[3][\*]**. Any outputs that are currently set **[ON]** will be shown as an illuminated zone indicator.

To toggle the output status, enter **[OUTPUT NUMBER]** followed by **[\*]**. Press **[#]** to exit User Program Mode.

**Ensure that you have checked with your installer which outputs are used for radio reporting so as to prevent the triggering of false alarms.**

## User Guide Quick Reference

Description	Programming
Add a User Code	[*] + [Master Code] +[*] + [0] + [*] + [New Code] + [*]
Change a User Code	[*] + [Master Code] +[*] + [2] + [*] + [Old Code] + [*] + [New Code] + [*]
View a Slot Number	[*] + [Master Code] +[*] + [3] + [*] + [User Code ] + [*] View the Slot number via the zone LED's.
Edit User Code Properties	[*] + [Master Code] +[*] + [4] + [ * ] + [User Code ] + [ * ] + [2 or 3 or 4] + [*] 2 = Duress 3 = Arm to Disarm Code 4 = Global Arm/Disarm Code
Allocate a User Code to a Partition	[*] + [Master Code] +[5] + [*] + [User Code] + [*] + [Partition Number] + [*] + [#]
Teach a Remote to a User Code	[*] + [Master Code] +[*] + [8] + [*] + [User Code] + [*] Press Tx Button
Delete User Code by Code	[*] + [Master Code] +[*] + [9] + [*] + [User Code] + [*]
Delete User Code by Slot Number	[*] + [Master Code] +[*] + [10] + [*] + [Slot Number] + [*]
Change Partitions	[Mode] + [1] +[*] + [Partition Number] + [*]
Select a Stay Profile	[Mode] + [2] +[*] + [Profile Number] + [*]
Program / Cancel Stay Zone	[3] + [Zone Number] +[*] + [#]
Program / Cancel Buzz Zone	[4] + [ Zone Number ] +[*] + [#]
Program / Cancel Chime Zone	[2] + [Zone Number ] +[*] + [#]
Quick Arm	[1]
Quick Stay	[5]
Stay Arm and Go	[6]
Bypassing / Un-Bypassing a Zone	[9] + [Zone Number] +[*] + [#]
Alarm Memory	[0] Displays zones violated, [02] Displays zones bypassed
View Trouble Conditions	[7]      1 = AC Mains fail      2 = No Communication 3 = Phone Line      4 = Siren Tamper 5 = Low Battery      6 = Loss of clock timer 7 = Engineer Reset   8 = Box Tamper 10 = Tamper on Peripheral 11 = Comms failure to peripheral device 12 = Loss of power to peripheral device