# Wireless Siren WP70A

Manual

# **Brief description**

Secor® WP70A is the new generation of wireless siren. It incorporates a 3.6V lithium battery to power the siren unit. The Greensmart<sup>®</sup> power saving technology allows WP70A to achieve battery life up to 5 years (with typical use).

The unit has full supervision on tamper, low battery and RF comm.

It complies with C tick, EMC and IP55.

### Part number

WP70AL- a local transceiver connected to alarm panel WP70AS - a siren unit powered by a non-rechargeable lithium battery WP70A -- an independent wireless siren kit comprising a WP70AL and a WP70AS

### WP70AL Terminals:





### Siren and Strobe Input Wiring

Connect Siren and Strobe to either Negative or Positive activation output from alarm panel. Each of Siren and Strobe needs ONE wire only (i.e. trigger) connection.

## Supervision Output Wiring

Three supervision outputs are open collector type and Normally Switched to Ground. Each output needs ONE wire only connection.

Status of tamper, low battery (L/B) and RF comm can be reported individually or in series via the DIP setting. This function provides the option to use three or two zones or even one zone only for full supervision. A tri-colour LED on WP70AL board is used to indicate three supervision statuses: Red - tamper; Green - low battery and Amber - RF comm.

Switch 1,2,3 represent tamper, L/B and RF comm. respectively. Set them "ON" for series output. For example:



OFF. 2&30N



Report individually; 3 zones required L/B and RF in series; 2 zones required:

one connected to "Tamper" and the other to "L/B"

All in series; 1 zone required: connected to "Tamper"

### Preparation

- 1. Set DIP switch as above to decide the number of zone used to report supervision status.
- 2. Ensure that the alarm panel has been programmed to work with WP70A.
- Select a location for siren unit WP70AS. The distance between WP70AS and WP70AL should be kept within 50m.

## Installation and testing

- 1. Connect WP70AL to the alarm panel and switch the panel's power on.
- 2. Plug in the lithium battery. The eight-minute engineering time will begin. During this period, when the tamper switch is released, WP70AS will operate at a reduced intensity of noise and flashing to protect installers from the exposure to excessive noise and brightness. Eight-minute is long enough for installers to do basic testing. If more time is required, unplug the battery and re-plug it to restart the eight-minute engineering time.
- 3. Test the operation of the siren, strobe and tamper by pressing and releasing the tamper switch.
- 4. Use the template provided to mark the position of mounting holes, drill and mount the backplate onto the wall. Position and secure the cover onto the backplate. Ensure the tamper switch is closed and WP70AS stops sounding and flashing.
- 5. Go back and send Panic or Fire out from the panel, WP70AS will respond by making a steady or pulsed noise respectively.
- 6. WP70AS will be restored when it receives Restoral command from the panel. Otherwise, the siren will continue to sound and flash until the cut-off time of 5 minutes (or 3 minutes) expires.

### Tamper operation

During the eight-minute engineering time, WP70AS will constantly send a "normal tamper closed condition" signal to the panel but will trigger the operation of the siren and strobe by itself when the tamper switch is released (to open status).

During normal operation, when WP70AS is tampered, it won't trigger the operation of siren and strobe by itself; instead it will send "tampered condition" to the panel. The panel then triggers the operation of the siren and strobe.

## Enrolling

Each WP70AS has been pre-enrolled into WP70AL as a set. To replace the WP70AS and enrol a new one:

- 1. Place WP70AS next to WP70AL and turn both units on.
- 2. Press and release the tamper switch to activate RF chip LED flashes. Quickly press the tamper switch three times within 1 second. The LED will turn on and stay steadily - in program mode.
- Press Program button on WP70AL board within 1 minute.
- 4. The indicating LED flashes 3 times rapidly; done. If that WP70AS has been enrolled previously, there will be no flashes. After re-enrolment, the default values will be restored.

#### **Cut-off time setting**

By default the cut-off time is 5 minutes for both siren and strobe. It can be changed to 3 minutes by the following:

- 1. Press and release the tamper switch to activate RF chip LED flashes. Quickly press the tamper switch three times within 1 second. The LED will turn on and stay steadily— in program mode.
- 2. Wait for 1 second and press the tamper switch three times again within 1 second to exit programming.
- 3. The LED flashes rapidly three times. Done.

To change back to 5 minutes: do nothing during program mode. The LED will extinguish within 1 minute – back to default. Done.

#### Supervi.sion

- 1. Tramper: when WP70AS is tampered, it will report "tamper" to the panel.
- 2. Low battery: WP70AS will report "low battery" when the capacity of battery drops to a level at which it can support supervision operation further only for about 7 days.
- 3. WP70A will periodically check and report the status of RF communication.

### **Battery life**

Battery life is adversely affected by high or low temperature, aging, and discharge rate. The battery is expected to last up to 5 years with typical use – thanks to its Secor® power saving technology.

### Specifications:

| WP70AL (local transceiver)   |  |
|------------------------------|--|
| Operating voltage            | 6-15VDC                                    |
| Current (average)            | 30mA max; 03mA standby                     |
| Transmitting Power           | <10mW                                      |
| Frequency:                   | 433.92Mhz +/-75Khz                         |
| RF range:                    | 200m (open air)                            |
|                              |  |
| WP70AS (Siren)               |  |
| Battery                      | non-rechargeable lithium battery 3.6V 19Ah |
| Current (average)            | 300mA max; 0.25mA standby (average)        |
| Taransmitting Power          | <10mW                                      |
| SPL                          | 106dBm                                     |
| Strobe (high intensity LED)  | 80/min                                     |
| IP rating                    | IP55                                       |
| Housing/strobe lens material | UV treated Polycarbonate                   |
| Temperature/humidity         | -10— 50°C/95% RH (max)                     |

#### Main Features:

- Secor power saving technology extraordinarily long battery life: up to 5 years (typical use)
- Fully supervised tamper, low battery and RF comm
- Long RF range ~ 200m (open air)
- IP55 double plastic cover for extra protection against harsh condition
- Robust case siren housing and strobe lens are made of rugged UV treated polycarbonate
- Easy to operate the dual function tamper switch is designed for easy programming/enrolling
- Easy installation can be fully integrated with any alarm panel
- Flexible zone utilization option to use three, two or even one zone to achieve full supervision
- Able to distinguish between burglar and fire alarms
- Designed for Australian harsh conditions and to meet Australian standards

EXAMPLE: 6000



WP70A

WIRING.