SENTRY™
AUTOMATICALLY THE BETTER CHOICE

Sentry 4 Zone Alarm Panel

User Manual
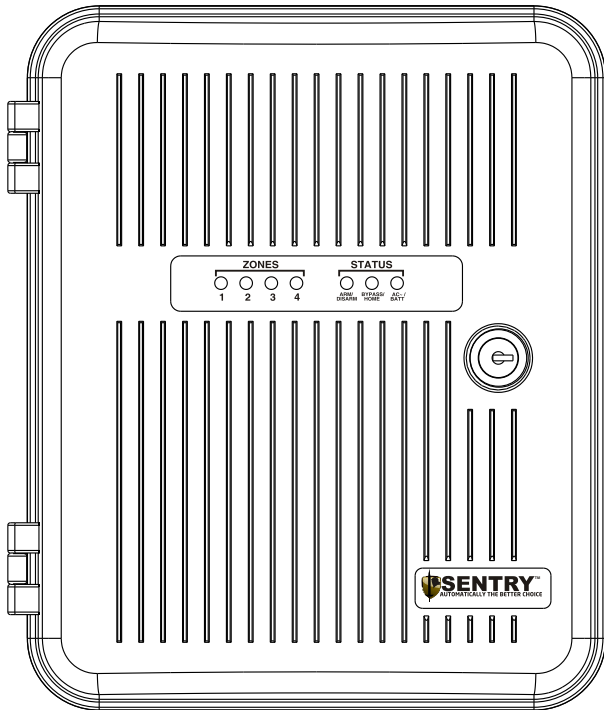
PLEASE NOTE: A 16Vac / 16VA Transformer MUST be used with this product.

Contents

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Introduction

Congratulations on your purchase! The Sentry 4 zone alarm panel is a microprocessor based product that provides 4 hardwired zones as well as a remote panic and 2 output triggers that can be used for armed response purposes. It is a compact low cost system that is easy to use and provides peace of mind.

The system consists of a build in receiver module that makes installation and operation easier. The system is controlled from a 4 button remote.

Programming a Remote

The system can handle a maximum of 15 remote's. Zones 1 to 4 represents the remote location in a binary format as follows:

Zone Led's				Remote Memory Location
① ●	②	③	④	Memory Location 1
①	② ●	③	④	Memory Location 2
① ●	② ●	③	④	Memory Location 3
①	②	③ ●	④	Memory Location 4
① ●	②	③ ●	④	Memory Location 5
①	② ●	③ ●	④	Memory Location 6
① ●	② ●	③ ●	④	Memory Location 7
①	②	③	④ ●	Memory Location 8
① ●	②	③	④ ●	Memory Location 9
①	② ●	③	④ ●	Memory Location 10
① ●	② ●	③	④ ●	Memory Location 11
①	②	③ ●	④ ●	Memory Location 12
① ●	②	③ ●	④ ●	Memory Location 13
①	② ●	③ ●	④ ●	Memory Location 14
① ●	② ●	③ ●	④ ●	Memory Location 15

To start with the programming sequence:
- Open the Alarm panel Box.
- Press and release the LRN button on the PCB located in the box. The system will beep once, and will enter the first memory location. When the memory location is filled the led will flash and when the memory location is open the corresponding led will be ON solid. To advance to the next memory location press and release the LRN button again. The memory location is indicated via the led's on the front of the box.
- Press the remote button to be learned in. The green led (Bypass) will flash and the system will exit programming mode on acceptance of the code.
- Any button can be used to program the remote into the system. The system automatically assigns the functions to the remote buttons.
- A new remote can be learned into a filled location, keeping in mind that the old remote will be lost.
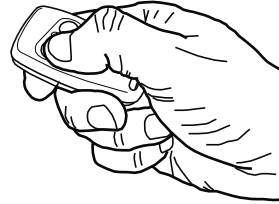
The remote buttons have the following functions:
- Button 1 - Instant Arm System
- Button 2 - Instant Disarm System / Clear Panic
- Button 3 - Zone bypass
- Button 4 - Panic (~3Sec)

Deleting all Remote's

To delete all the remote's in the system, the following sequence must be followed:
- Open the alarm box.
- Press and hold in the LRN button on the PCB located in the box.
- After approx 5 sec the system will sound three short beeps indicating that the remote's has been removed from the system.

The siren function:

The siren is used to indicate a zone violation or a panic. When a violation occurs the siren will be activated for approx 2min, then it will turn off. The system will still be armed and any zone violation will activate the siren again.

The siren is also used to indicate when the system is armed and disarmed. When the system is armed the siren hoots **once** and when the system is disarmed it hoots **twice**.

The strobe function:

When the system is armed and a violation has occurred the strobe function will be activated and it will remain active until the system is deactivated.

The Key Switch:

The option of a key switch is provided by adding a 1K resistor in series with the keyswitch onto zone 4. This will enable you to arm and disarm the system, When arming the system via the key switch, the exit timer will start beeping for approx 30 sec, where by the system will be fully armed.

Arming and disarming the system:

To arm the system press button 2 on the remote. It is instant arming of the system and any violation will sound an alarm. Thus, make sure that the premises is evacuated before the system is armed.
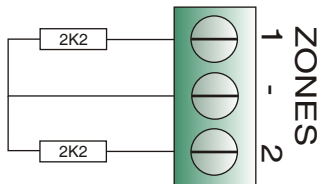
To deactivate the system, press button 2 on the remote. Premises can now be entered.

Connecting detectors to the system:

To Connect a PIR or door contact to the alarm panel, a 2K2 resistor (provided) must be connected in series with the device.
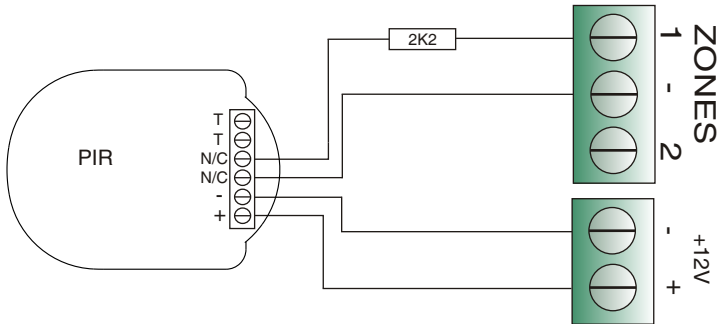
If the zone is not in use, connect the resistor to the terminals as shown below.

Battery low indications:

When the mains is disconnected from the system, the AC led will be OFF and the system will monitor the battery. When the battery voltage reaches 11.5V the AC led will start to flash, indicating that the battery level has dropped from full charge. At 10.8V the AC led will still flash and the system will now beep, indicating that The battery is low. When mains is connected the AC led will be ON.

How the zones work:

A form of detection device is connected on a zone and is monitored by the system. This can be an infra red detector or a door contact. When a zone is not bypassed and the system is armed, any violation of that zone will activate an alarm.

The zones have the following functions:
* Zone 1 - Timed Entry / Exit zone
* Zone 2 - Follower Zone
* Zone 3 - Instant Zone
* Zone 3 - Instant Zone

A 2k2 resistor provided with the system needs to be placed in series with the Passive infra red detector or the door contact. (The resistor must be placed close to the detector as possible)

Note: Output trigger 2 is by default assigned to a burglary condition.

The Panic Function:
The hardwired panic is a normally closed connection (See Appendix A for connection). If not connected properly the system will sound an alarm when the system is start-up for the first time. To deactivate the hardwired panic or the remote panic, press the arm disarm button on the remote.
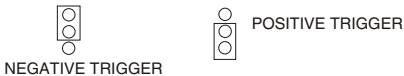
Note: Output Trigger 1 is by default assigned to the panic condition.

The output Triggers:
The system has 3 output triggers. They can be used as positive (+5V) or negative polarity by making use of the links provided.

There functions are as follows:
* Output 1 - Panic
* Output 2 - Burglary
* Output 3 - LED Status Indicator

NEGATIVE TRIGGER   POSITIVE TRIGGER

LINK CONNECTION FOR POSITIVE AND NEGATIVE TRIGGER.

Bypassing a Zone:
Bypassing a zone enables that zone to be omitted from the system, thus free to use that room without triggering an alarm.

To bypass a zone the following sequence must be followed:
* Press Button 3 on the remote, the green (bypass) led will start flashing. The system provides a time of approx 15 sec to do bypassing, where by it will exit from the bypassing function.
* The 4 buttons on the remote represents the 4 zones. Pressing the button corresponding to the zone once will bypass that zone and the zone led will be ON solid. By pressing the same button again will undo the bypassing on that zone.
* Make the selection of zone to bypass. The bypass function will then exit after approx 15 sec and the system will return to normal operation. The zone that are bypassed will then be displayed.
* Press the arm / disarm button to arm the system. The zones are cleared upon arming of the system.

The Chime Function:

From time to time the need arises to know when a zone is triggered without setting off an alarm. To enable the chime function press Button 1 and 2 together once. The system will beep and the green bypass led will start flashing. When a zone is triggered a zone, a pulsed beep will be heard for the duration the zone is triggered.

To disable the function press button 1 and 2 together again, the system will beep again, and the green led will turn off.

The user can go directly from chime function to away arm, by pressing button 1. The green led will turn off and the away arm led will be on.

Remote Functions:

The Remote is used to control most of the system functions. The Remote buttons have the following functions:

- Button 1 - Instant Arm
- Button 2 - Instant Disarm
- Button 3 - Zone bypass
- Button 4 - Panic
- Button 1 and Button 2 - Enable/Disable Chime Function

Instant Home arming function:

When using the Home arming function, the system enters instant arm mode with zones 2 and 3 bypassed. The green led(bypass) will be ON.

To enter Instant Home arming mode press buttons 3 and 4. Zones led 3 and 4 will flash briefly to indicate with zones was bypassed.

Zone Information:

Enter Zone names for a reference.
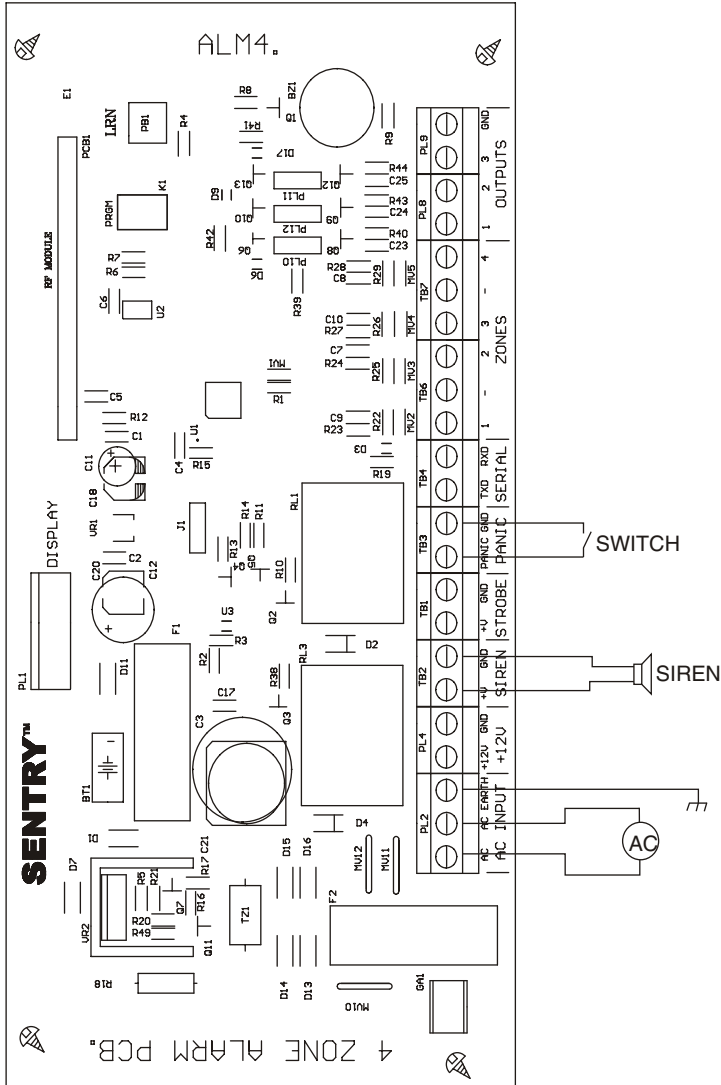
Zone 1   _____

Zone 2   _____

Zone 3   _____

Zone 4   _____

Technical Information:

AC Input Voltage: ~16VAC/16VA Transformer (Earth from the panel must be connected to mains earth)
Battery Backup: 12V/7Ah
Remote Freq: 433.925Mhz
Remote Type: Keeloq
Remote Control Storage: 15 Remotes

APPENDIX A

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