



16-Zone Wireless Expander

Introduction

Thank you for purchasing Watchguard™ Wireless Expander. The Watchguard™ X-Series Wireless Expander offers additional 16 wireless supervised zones, two programmable or preset outputs.

For more information on Watchguard™ products, please visit: www.rhinoco.com.au

Note: Read the entire manual before attempting to install the Wireless Zone Expander.

Features

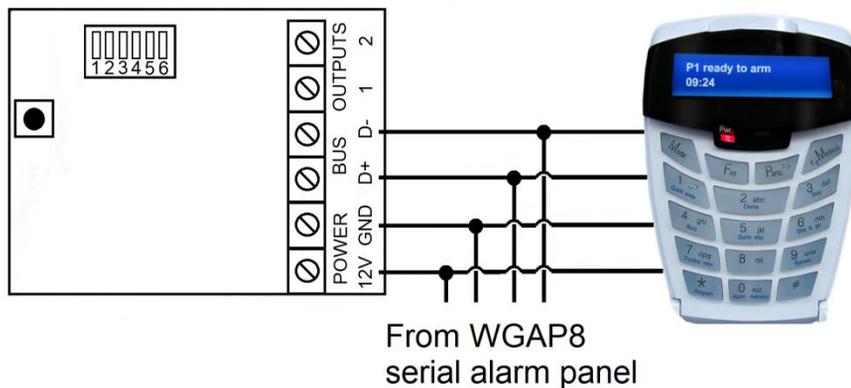
- ✧ 16 Wireless Zones with supervision
- ✧ Optional tamper per zone
- ✧ Dedicated Box Tamper Input
- ✧ Excellent protection against lightning
- ✧ Supply Voltage Monitoring
- ✧ Battery monitoring

Installation

Communication Bus Wiring

The wireless zone expander must receive 12V power from the Watchguard™ alarm panel (WGAP864) to reduce the chance of ground loops on the keypad bus which will cause communication errors.

Figure 1: Wireless Zone Expander Bus Connection



Addressing via DIP switch

To address the expander, set the DIP switches as below:

Switch Position	Expander's zone
1 ON (up) 	1-16
2 ON (up) 	17-32
1+2 ON (up) 	33-48
3 ON (up) 	49-64
4	not used
5 OFF (down) 	PGM1 will mimic PGM1 output on bus wired expander with the same ID.
5 ON (up) 	PGM1 will set on RF jam and clear on RF jam clear for the zones allocated to the receiver.
6 OFF (down) 	PGM2 will mimic PGM2 output on bus wired expander with the same ID.
6 ON (up) 	PGM2 will set on ANY Supervision fail, and clear on ALL supervisions restored for the zones allocated to the receiver.

NOTE: Wireless zones take precedent over wired zones. If you learn a detector onto a zone with a wired detector, the wired detector will be ignored. If a detector is allocated to a zone, and the expander corresponding to that zone as addressed in the table above, is not installed, the panel will not communicate with that detector.

Starting up the Zone Expander

There are 3 LEDs on the board marked "MODE", "RF RX" and "STATUS".

STATUS: LED indicates whether it is connected to the WGAP864 alarm panel properly. If the receiver notices WGAP864 communications then it will stay ON.

RF RX: LED indicates when the receiver received a message from a learnt detector.

MODE: LED indicates current operating errors. Errors are indicated much the same as the wired expander. If the LED is ON continuously then there are no errors. However if there are errors, it will start pulsing the error number. These error pulses will be separated by a 1 second pause with the LED OFF.

Pulse error number:

1. Receiver Not Responding
2. No activity on the WGAP864 Serial bus
3. No WGAP864 messages detected
4. No messages for this peripheral detected from WGAP864
5. Not used
6. Expander not yet registered on the WGAP864
7. Expander tamper violated
8. Unsupported DIP address configured

Programming the WGAP864 alarm panel

You need to program Location 260 on the WGAP864 alarm panel so that the wireless expander will be added.

Enter:

Location 260

This location is broken up into different sub locations. Each sub location has a different function.

Sub location 1: Add devices

Sub location 2: Delete wireless devices

Sub location 3: Checking signal strength

Sub location 4: Supervision Time

Sub Location 1: Adding Wireless Detectors

There are two methods of teaching a wireless device to the wireless receiver.

1. Press the tamper switch when required.
2. Type in the serial number of the device when required.

LCD Keypad (WGAP864KP) instructions

Upon Sub menu entry the following will be displayed on the keypad:

Zone Name <*>

Zone No+*

3. The user now need to specify which zone they want to add to the receiver by either:
 - ❖ Press [<] or [>] to scroll through the zone names and then press [*] to select the zone .
 - ❖ Enter the zone number then [*]. Press [*] again to confirm the selection.
 - ❖ Press [#] will return user to sub menu selection entry.

Note: When scrolling through the zones, the following will be displayed on the keypad:

Zone Name <*>
02 Zone 02 W

Zone Name <*>
02 Main Lounge W

The "W" after the zone name will signify whether the zone has been pre-allocated to a wireless detector or not.

Select a zone that has been pre-allocated will result in an error and the user will be alerted with 3 error beeps.

Upon selecting a valid un-allocated zone, the following will be displayed on the keypad:

Tamper or Enter

SN: _____

The user must now either trigger the tamper on the detector or type in the serial number of the device, which is on the product label on the device.

When the user triggers the tamper, the system will receive a notification and determine whether the detector has already been assigned to any other zones. If this is the case, the user will be notified by 3 error beeps and the menu will keep waiting for a tamper from an unassigned detector.

Incorrect or pre-allocated serial numbers will also result in a 3 beep error tone and the menu will keep waiting for a valid entry.

Upon a valid serial number being entered or set via tampering the device, the following will be displayed on the keypad:

Tamper or Enter

SN:12345678[*]

Sub Location 2: Deleting Wireless Detectors

This sub location is accessed similar to sub location 1.

Sub Location 3: Signal Strength of Detector

This sub location is accessed similar to sub location 1 and 2.

Note: Only the device learnt to that zone can be tested.

Sub Location 4: Supervision Setup (Default: 24 hours)

The user needs to enter one of the following numbers to instruct their receivers globally of the new supervision time parameter:

1 ** (3 hours before supervision fail)

2 ** (24 hours before supervision fail)

Note: The supervision period on the detector must match the supervision period on the panel.