Zoneguard ZG800 Installation Instructions

ZONEGUARD is a Grade 3 EN50131-3:2009 Environmental Class II zone omit unit that fits between intruder detection devices and a control panel to allow the devices to be securely and safely omitted and reinstated.

In its simplest mode ZONEGUARD uses its integral keyswitch to omit or reinstate. Other modes are available using the integral keypad or external devices such as biometric reader or a combination of keyswitch and keypad, useful where dual responsibility is needed. Timed entry/exit modes are also available.

The ZONEGUARD requires a supply of 12vdc.
(120ma quiescent - 200ma peak)

General Rules

A. Zones will always omit using an omit function.

B. If any zone has a detection condition during reinstatement, then it must be returned to omitted state and the detection condition cleared and then reinstated.

When powered, no indications should be seen. If the unit should bleep and LED III indicates then the memory has been corrupted and the unit will require setting up.(See 'set/change mode' instructions)

The NVM (Non Volatile Memory) remembers how the unit was previously set up, including the code, if used, after a power down.

There are seven operational modes:

1.Integral keyswitch mode. (Factory default)

2. Integral keypad mode.

3.Remote latching input mode, eg. keyswitch

4. Remote non-latching input mode, eg. biometric).

5.Combination of integral keypad & integral keyswitch.

6.Timed entry/exit, integral keyswitch execute.

7.Timed entry/exit, integral keypad execute.

Operational instructions

To omit the zones

Mode 1 turn the unit keyswitch to position O.

Mode 2 type in the 6 digit code.

Mode 3 operate the remote device

Mode 4 operate the remote device

Mode 5 type in the 4 digit code and the unit will bleep for approx. 10 seconds. During this time turn the unit keyswitch to position O.

Mode 5 alternative operation. Turn the keyswitch to position O and while it is there type in the 4 digit code.

Mode 6 open the start timer contact and the unit will bleep for the entry/exit time. While the timer is timing, turn the keyswitch to position O.

Mode 7 open the start timer contact and the unit will bleep for the entry/exit time. While the timer is timing, type in the 6 digit code.

Omit Indications

In any mode, when the zones are omitted, a double bleep will sound.

To reinstate the zones

Mode 1 turn the unit keyswitch to position R.

Mode 2 type in the 6 digit code.

Mode 3 operate the remote device

Mode 4 operate the remote device

Mode 5 type in the 4 digit code and the unit will bleep for approx. 10 seconds. During this time turn the unit keyswitch to position R.

Mode 5 alternative operation. Turn the keyswitch to position R and while it is there type in the 4 digit code.

Mode 6 turn the keyswitch to position O the unit will bleep for the entry/exit time. While the timer is timing you can open and close the start timing contact, but if it is open at the end of the entry /exit time, it will indicate fault.

Mode 7 type in the 6 digit code, the unit will bleep for the entry/exit time. While the timer is timing you can open and close the start timing contact, but if it is open at the end of the entry /exit time, it will indicate fault.

Reinstate indications

In any mode, when the zones are re-instated, a long single bleep will sound.

In any mode, if the alarm zones are not clear for re-instating, or in modes 6 and 7 the entry/exit start contact is open, then the tone will not silence after 2 seconds, but continue to indicate that all is not well. In addition to the sounder, an led will indicate the source of the problem, either alarm zones 1 and 2 (LED I and LED II), or the entry/exit start ting contact LED III.

If a fault is indicated, then you must omit the zones again. The led indication will remain until the source of the fault is cleared, then the led indication will clear and re-instating can be attempted again.

User Code Changing from the keypad

An authorised user, can change the code from the keypad, but only if the zones are not omitted. To change the code, simultaneously press 0 and 1 a double beep will sound and three LEDs will be illuminated. Enter the current code, a double beep will sound and LED I will extinguish LEDII and LEDIII will remain illuminated. Enter the new code. A double beep will sound, LEDII and LEDIII will extinguish.

The change must be completed within 30 secs.

Set / change mode instructions

The ZONEGUARD will work out of the box in mode 1 without any set up. All setting/changing the mode operations must be carried out with the key in the R position. To set up the unit or change modes move jumper J1 to the set position A. Two bleeps will sound and three LEDs illuminated. Next, enter the required mode number:

Mode 1 press 1. Two bleeps will sound and LEDI and LEDII will extinguish. LEDIII will remain illuminated and the unit will bleep until J1 is moved to the operational position B.

Mode 2 press 2. Two bleeps will sound and LEDI will extinguish. LEDII and LEDIII will remain illuminated. Type in your six digit code. Two bleeps will sound and LEDII will extinguish. LEDIII will remain illuminated and the unit will bleep until J1 is moved to the operational position B.

Mode 3 press 3. Two bleeps will sound and LEDI and LEDII will extinguish. LEDIII will remain illuminated and the unit will bleep until J1 is moved to the operational position B.

Mode 4 press 4. Two bleeps will sound and LEDI and LEDII will extinguish. LEDIII will remain illuminated and the unit will bleep until J1 is moved to the operational position B.

Mode 5 press 5. Two bleeps will sound and LEDI will extinguish. LEDII and LEDIII will remain illuminated. Type in your four digit code. Two bleeps will sound and LEDII will extinguish. LEDIII will remain illuminated and the unit will bleep until J1 is moved to the operational position B.

Mode 6 press 6. Two bleeps will sound and LEDI will flash. LEDII and LEDIII will remain illuminated. Type in the entry/exit time in seconds(two digits) two bleeps will sound LEDI and LEDII will extinguish. LEDIII will remain illuminated and the unit will bleep until J1 is moved to the operational position B.

Mode 7 press 7. Two bleeps will sound and LEDI will flash. LEDII and LEDIII will remain illuminated. Type in the entry/exit time in seconds(two digits) two bleeps will sound LEDI will extinguish leaving LEDII and ledIII illuminated. Type in your six digit code. Two bleeps will sound and LEDII will extinguish. LEDIII will remain illuminated and the unit will bleep until J1 is moved to the operational position B.

Mode8 press 8. Two bleeps will sound and LEDI will flash. LEDII and LEDIII will remain illuminated. Press 0 for neither or press 1 for zone 1 only or press 2 for both zones to sound alarm tone. Two bleeps will sound LEDI and LEDII will extinguish. LEDIII will remain illuminated and the unit will bleep until J1 is moved to the operational position B.

Mode0 press 0. Two bleeps will sound and LEDI will flash. LEDII and LEDIII will remain illuminated. Press 0 for no bleep while omitted or press 1 to enable bleep while omitted. Two bleeps will sound LEDI and LEDII will extinguish. LEDIII will remain illuminated and the unit will bleep until J1 is moved to the operational position B.

Additional features

Remote Re-Instate

It is possible to re-instate the zones from a remote device (Control panel, central station, time clock etc). Apply a momentary +ve to RMT2. If the zones have been omitted by the keyswitch or a latching device connected to RMT1 LED III will illuminate to warn that the zones are re-instated but the keyswitch is not in the correct position. To rectify this turn the keyswitch to the re-instate position.

Omitted Relay

This relay follows the Zoneguard state at all times and could be used to signal the status to a main control or central station. The contacts are rated 30vdc 1A .

Remote Sounder Output.

An open collector sounder output is provided to drive remote sounders (12vdc 100ma max). This output sounds omitted and reinstated tones.

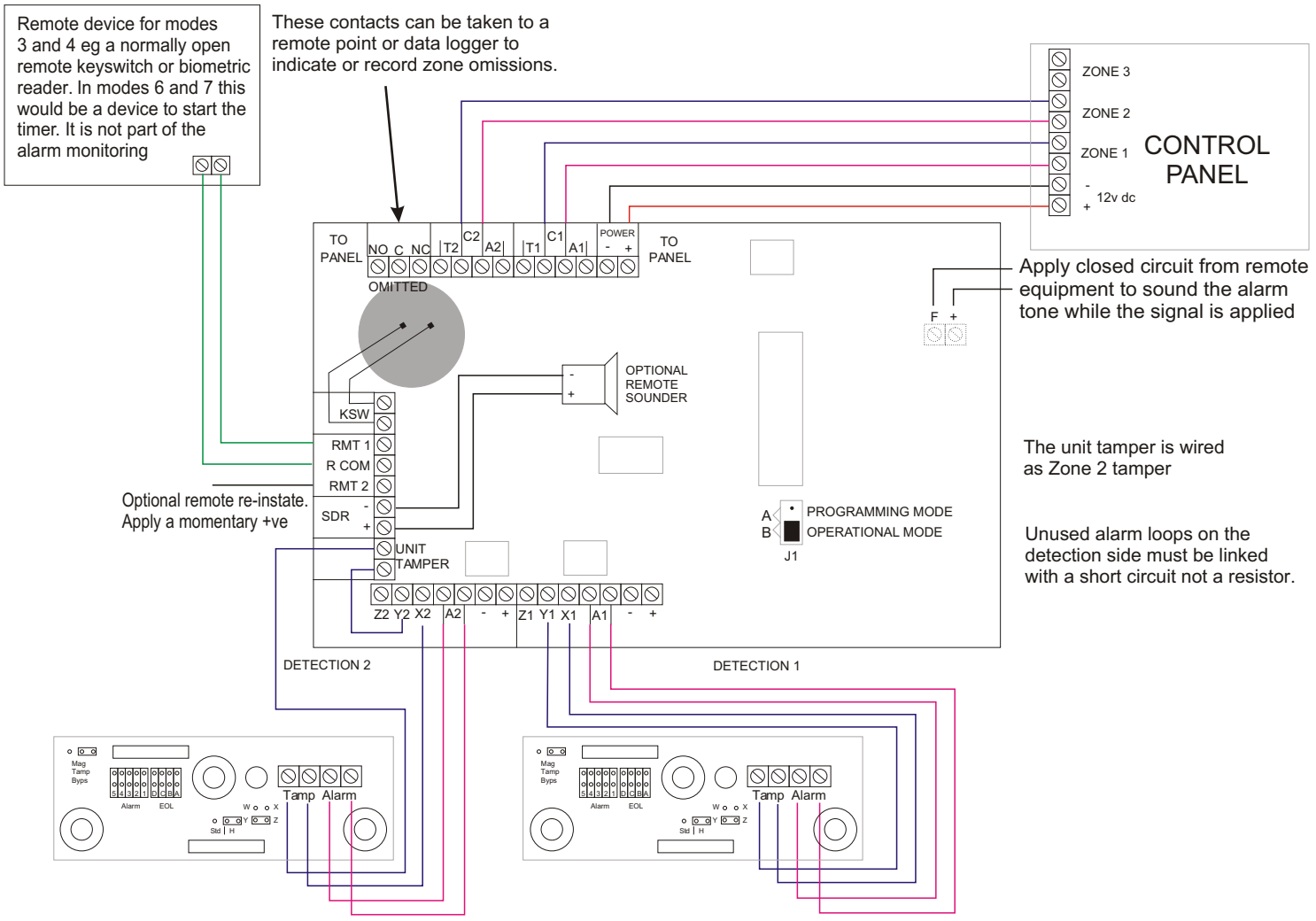
Zoneguard Sounder Control Input.

Apply closed circuit from other equipment to sound the alarm sounder at any time omitted or reinstated.

Bleep While Omitted programmed as mode 0. While the Zoneguard is omitted the sounder double bleeps every 30 seconds. Programming options are on or off. The default is off.

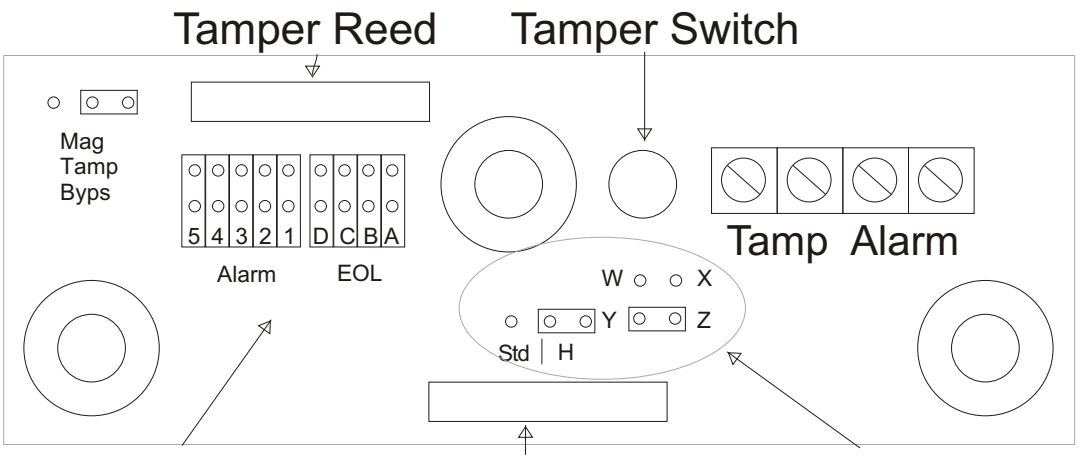
Omitted Door Alarm. Programmed as mode 8. While the Zoneguard is omitted the alarm sounds for the duration that a alarm zone is open. Programming options are neither, zone 1 only or zone 1 and zone 2. The default is neither.

Configuration for Grade 3 Door Contact Hoyles DCS/G3



Door Contact DCS/G3 Door Contact DCS/G3

Grade 3 Door Contact Hoyles DCS/G3



Select Alarm and EOL jumpers to suit control panel

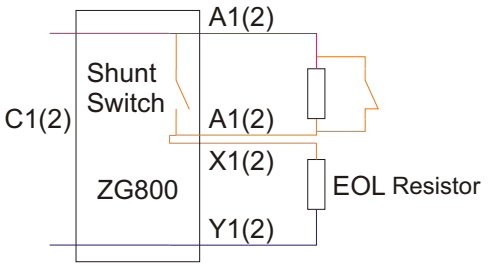
Alarm Reed

Control Jumpers Must be set as shown (W-X none) (Y-Z on) and (H on)

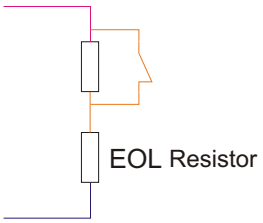
Zone omit theory

The main reason to use a Zone Omit Module, is to isolate a 24 hour protected zone from a security system without having full access to the security system and having isolation rights. It is **NOT** a local alarm.
One way to isolate a device is to short circuit the monitoring contact, so that when the monitored contact opens it appears as closed to the system. The simplest way of doing this is with a low cost keyswitch. However with just a keyswitch, an open contact will switch back onto the security system and cause a false alarm if accidentally left open when switching back. The zone omit module ensures that this does not happen and gives a local warning if you attempt to reinstate the open omitted device.
The Zoneguard ZG800 achieves this and does not isolate tampers thus allowing end of line monitoring by the security system.

Fully supervised loop with ZG800 zone omit

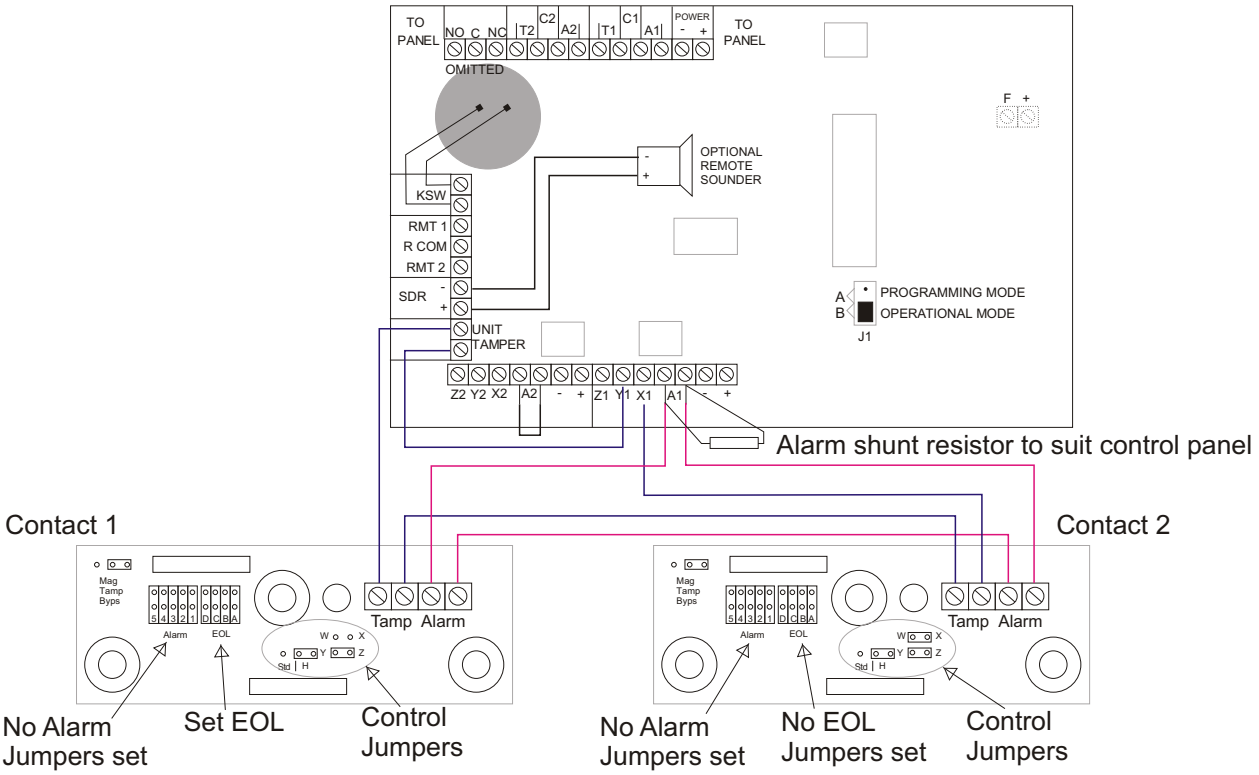


Classic fully supervised loop

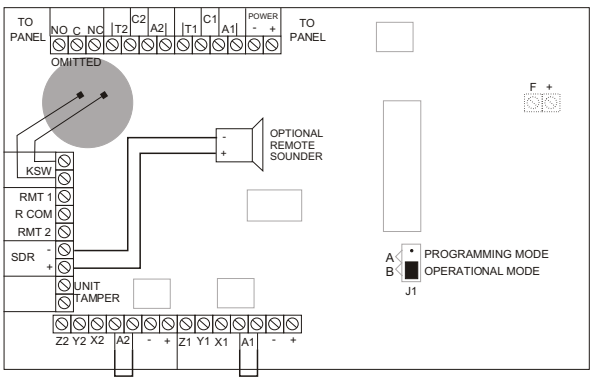


The EOL is always monitored by the intruder alarm electronic circuitry. When the shunt switch of the ZG800 is switched, the ZG800 circuitry starts to monitor the alarm loop (A1 or A2). This is why it is essential that there are no electrical connections external to the ZG800 between the Alarm loop and the EOL loop. Connections include resistors and links.
The ZG800 alarm loop monitoring is required to prevent faults from being reinstated onto the security system.
Any connections to the X and Y terminals pass through the Zoneguard without interference eg EOL and anti-mask. Anything across the 'A', terminals gets omitted.

Double Doors with DCS/G3 contacts (Only one zone shown for clarity)

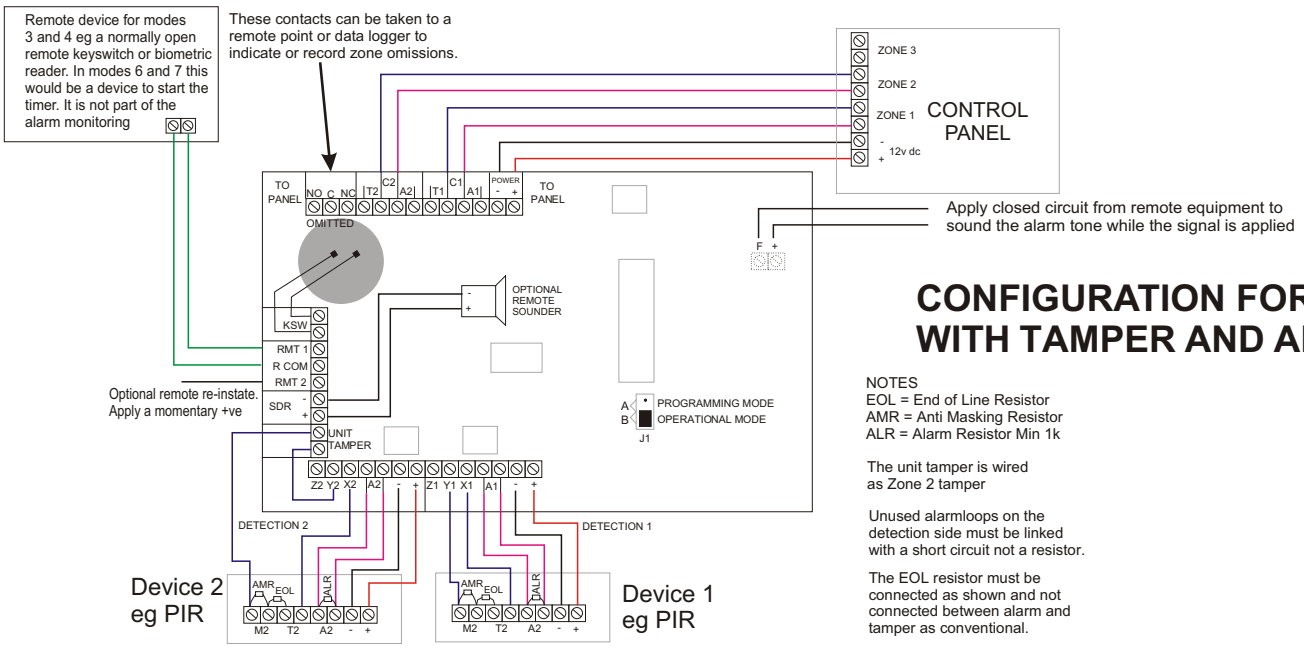


Unused zones



Any unused alarm loop on the detection side must be linked out. This is required is for the Zoneguard to be allowed to reinstate. The Zoneguard provides a local warning if a zone is not secure when you try to reinstate it onto the security system. It will leave both zones omitted if a fault is present. Normally the closed loop comes from a closed door or a detector that is not detecting. In the case of an unused zone, the loop allows the Zoneguard to reinstate the other used zone (if it is clear).

Note the unit sounder indicates faults when reinstating. It is NOT a local alarm sounder.



CONFIGURATION FOR EOL WITH TAMPER AND ANTI-MASK

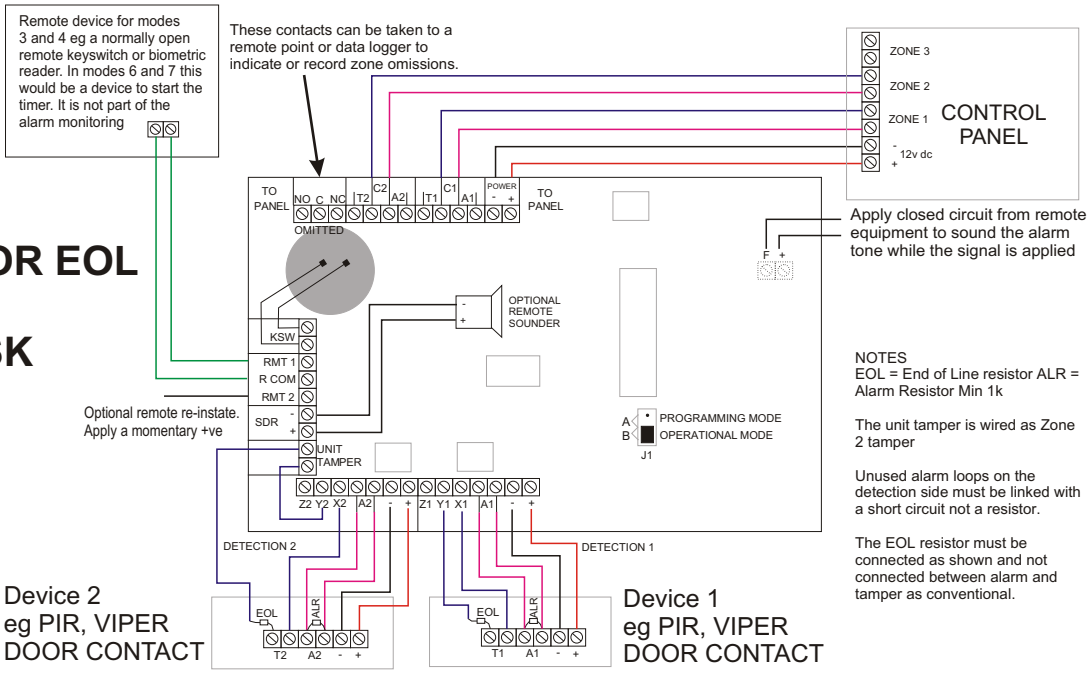
NOTES
EOL = End of Line Resistor
AMR = Anti Masking Resistor
ALR = Alarm Resistor Min 1k

The unit tamper is wired as Zone 2 tamper

Unused alarmloops on the detection side must be linked with a short circuit not a resistor.

The EOL resistor must be connected as shown and not connected between alarm and tamper as conventional.

CONFIGURATION FOR EOL WITH TAMPER BUT WITHOUT ANTI-MASK

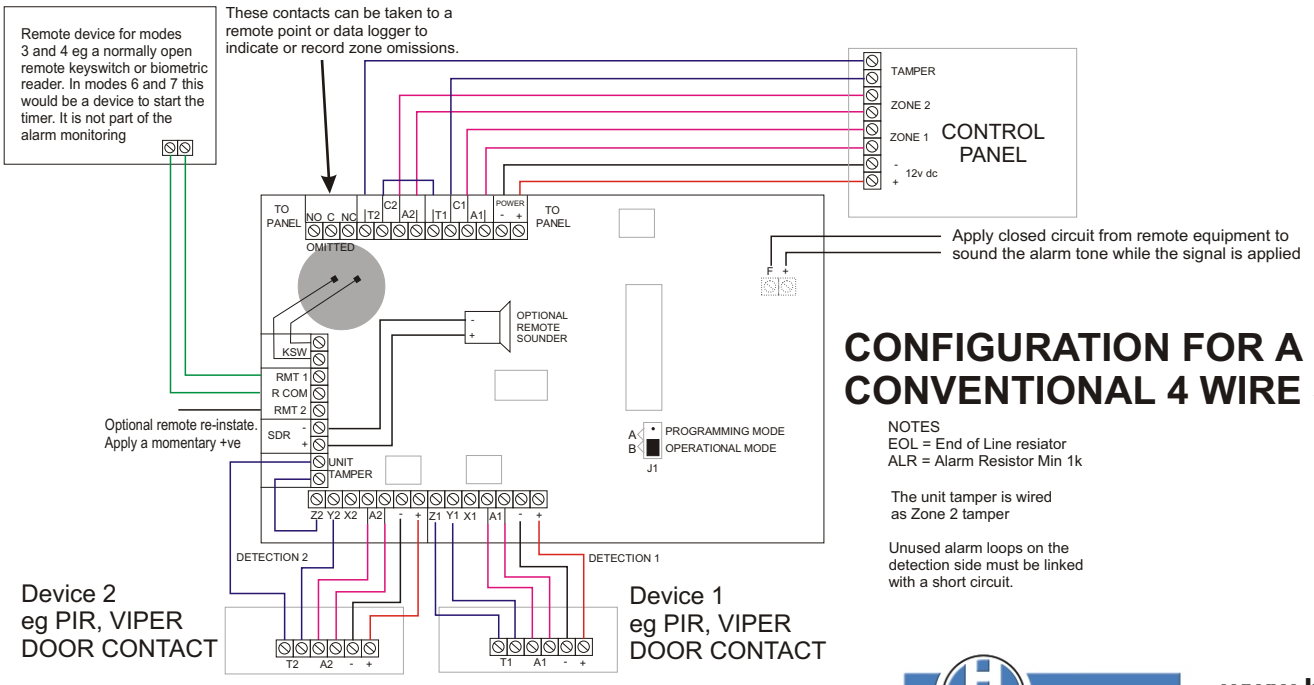


NOTES
EOL = End of Line resistor ALR = Alarm Resistor Min 1k

The unit tamper is wired as Zone 2 tamper

Unused alarm loops on the detection side must be linked with a short circuit not a resistor.

The EOL resistor must be connected as shown and not connected between alarm and tamper as conventional.



CONFIGURATION FOR A CONVENTIONAL 4 WIRE SYSTEM

NOTES
EOL = End of Line resiator
ALR = Alarm Resistor Min 1k

The unit tamper is wired as Zone 2 tamper

Unused alarm loops on the detection side must be linked with a short circuit.

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