

The range

SMS Alert 9

SMS Alert 9 is developed to connect to an existing alarm system or equipment to be monitored and controlled. It is a **9 input**, and **3 switched relay output** unit that keeps you in constant contact with your home or business. It notifies you instantly when the inputs are triggered by sending an SMS and missed call to **four** cellphones. You can phone the unit and listen in for possible intruders. As it is bi-directional, you can also send the unit SMS messages and control remote systems. SMS Alert 9 can be configured as a two-way intercom system using a **Base Station intercom**. The **input strings and phone numbers of the users are programmable by the user**.



Examples: AC Loss/Restore, motion detection; temperature monitoring; computer server room control; 3-phase imbalance; over/under voltage monitoring; field monitoring by using solar energy; opening of electric gates; steamer room control & monitoring; farm water pump control and monitoring; air conditioning monitoring and control; access control and monitoring, etc.

SMS Alert 1

SMS Alert 1 works on the same principle than SMS Alert 9, but it is smaller and less expensive. It is a programmable **dual single input**, and **1 switched relay output** device. The dimensions are approximately 155mm x 75mm x 55mm. It also reports to **four** cellphones.



Input 1: (Dual option)

Can be set to send a SMS on both a **Negative apply** or **Negative remove** trigger. The SMS that will be send is Programmable.

Examples: Open your car with your cell phone when you accidentally locked your key in your car; receive a SMS when your car alarm is on; activate pepper gas in your car; switch boiler rooms on, etc.

SMS Alert 9 Alarm /Plus

SMS Alert Alarm / Plus is a lockup-and-go alarm and does not require an existing alarm system. It is a **9 input**, **1 switched relay output**, LED and Siren output device. You can arm or disarm your SMS Alert Alarm via SMS, remote control or key switch. It reports to **four** cellphones.

SMS Alert 9 Intercom

This is an upgraded SMS Alert 9 that connects to a BPT intercom system. This system enables your visitors to call and talk to you from your intercom by pressing a button, where after you can open your gate via SMS. The user can change the phone number as required. It reports to **four** cellphones.

SMS ALERT 9

User Manual



SMS Alert

Version 8

- *Input 1 : BURGLARY
- Input 2 : **DISARMED , ARMED**
- Input 3 : **POWER LOSS, POWER RESTORED**
- *Input 4 : 24 HOUR TEST
- *Input 5 : DURESS
- *Input 6 : ELECTRIC-FENCE
- *Input 7 : ACC 1
- *Input 8 : GATE
- *Input 9 : PANIC

*Manufacturer must change the text of input 2 and 3 on request
(email the desired string / SMS characters to info@smsalert.co.za).
Input 2 and 3 are not programmable by the user.*

**Programmable by user from any cellphone.*

SMS Command Summary

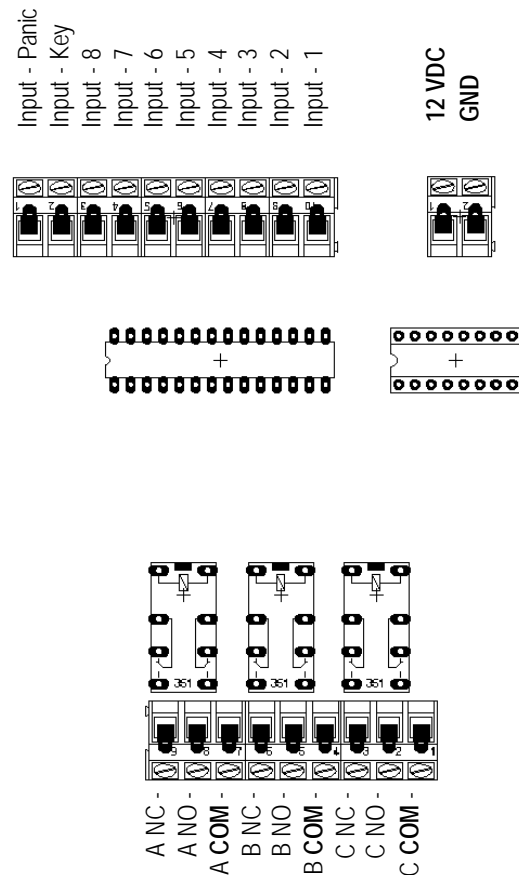
- 1234 B** - To let the SMS Alert report to the 1st phone (toggle)
- 1234 C** - Report to 2nd phone (toggle)
- 1234 D** - Report to 3rd phone (toggle)
- 1234 E** - Report to 4th phone (toggle)
- 1234 R** - To request the status of the SMS Alert
- 1234 A ON** – To switch relay A on (and the same for B and C)
- 1234 A OFF** – To switch relay A off (and the same for B and C)
- 1234 AP**- Pulse Relay A once for 500ms (and the same for B and C)
- 1234 APP** - Pulse Relay A 10 times (Pepper gas)
- 1234 01** - To toggle Missed Call function on or off
- 1234 02** – To toggle the SMS function on or off (Only applicable to SMS Alert Alarm)
- 1234 02** – To toggle the dual trigger mode (SMS Alert 1 only)
- 1234 03** – To toggle the inputs to trigger between negative apply (default) and negative remove.

Program Input Strings (max 19 characters)

- 1234 1 - String 1 (Input 1)
- 1234 4 - String 4
- 1234 5 - String 5
- 1234 6 - String 6
- 1234 7 - String 7
- 1234 8 - String 8
- 1234 9 - String 9 (panic)

*String 2 and 3 not programmable. Can be changed by manufacturer.

Figure 1 - SMS Alert (top view)



Quick Start Steps

1. **SIM card**
 - Insert the SIM card into the phone. Ensure the SIM card is activated. Test this by sending a SMS and making a missed call manually from the SMS Alert cellphone to your phone.
2. **Power**
 - Apply 12VDC.
3. **Pin code**
 - Type in the pin code that appears on your SIM card to start the phone.
4. **Pin code request**
 - This must be set to **OFF** (go to: Menu, Settings, Security Settings, Pin Code Request, Enter Pin Code).
5. **Red LED** (Light Emitting Diode)
 - The red LED (light on the side of the box) must be on. KEY/Led input must have +12VDC connected to it. The red LED will be on by default because of the loop wire.
6. **Auto Answer**
 - Ensure Auto Answer is **ON**. This should be on by default.
7. **Airtime**
 - Ensure that the SIM-card has sufficient credit. Load airtime if necessary.
8. **Message Inbox**
 - Ensure that the phone's inbox is empty. Once empty, the SMS Alert will automatically keep the inbox empty.

9. SMS **1234 b** from your cellphone to the SMS Alert. Note the **yellow LED** will light up when B is active. This step notifies the SMS Alert that it must report to the phone from which the SMS was sent. **There must be a space between 1234 and b.**
10. The SMS Alert will respond by sending its status back to you (e.g. **INPUT ON B- -, #000 #00000000**). **Ensure that the character "B" appears in the SMS.**
11. **Trigger input 1** - Pulse input 1 with a negative trigger for about 50ms (milliseconds). The green LED will go on to indicate that a SMS is being sent and you will receive a SMS **Burglary** and/or **Missed call** . The Missed Call feature can be toggled on and off by sending **1234 01** to the SMS Alert.

How to program the SMS Alert to report to a 2nd, 3rd or 4th cellphone

If you want the SMS Alert to report to a 2nd cellphone, send **1234** and then the character **c** from a second cellphone to the SMS Alert. To turn this feature **off**, SMS **1234** again and then the character **c** from the second cellphone.

E.g: **1234 c** (There **must be a space** between **1234** and **c**. Do the same for **1234 d** (3rd), and **1234 e** (4th).

How to operate the relay outputs

The three outputs can be used for anything that requires remote controlling, for example to switch machinery and equipment on and off or to open and close it, or to switch your alarm on and off.

SMS **1234** and the **command** to switch the relay outputs.

E.g: **1234 a on**. There **must be one space** between **1234** and **a** and **on**, or **1234** and **A** and **ON**.
 To switch relay A on, SMS: **1234 a on**, and the same for **1234 b on, 1234 c on**
 To switch relay A off, SMS: **1234 a off**, and the same for **1234 b off, 1234 c off**
 To switch **all** relays on, SMS: **1234 all on**, or else **1234 all off**
 To pulse relay A, SMS: **1234 ap**, and the same for **1234 bp, 1234 cp**
 To pulse a **pepper gas** unit through relay A, SMS: **1234 app**.

Programming the input SMS strings:

You are able to programme the SMS messages you would like to receive on your cellphone/s when your alarm goes off or when the inputs of the SMS Alert are triggered. Each input sends a different SMS to your cellphone/s. Input one is usually connected to a siren through an interface relay. Input two is usually connected to an alarm receiver so that it SMS you arm/disarm.

Important: The SMS must not be longer than 19 characters, including spaces, commas, etc.

Example: If you want input 1 to SMS **"John's room !"** when the input is triggered.

1. SMS **1234 1** (One space between 4 and 1 and no space afterwards.)
2. You will get the following SMS back: **Str 1 ?**
3. Then send the following SMS: **John's room !** (Do not include 1234!)
4. You will get the following SMS back: **Str1 OK**.

Input 1 : 1234 1
 Input 2 : Not programmable
 Input 3 : Not programmable
 Input 4 : 1234 4
 Input 5 : 1234 5
 Input 6 : 1234 6
 Input 7 : 1234 7
 Input 8 : 1234 8
 Input 9 : 1234 9 (Panic)

How to operate the microphone to silently listen in

You are able to phone the SMS Alert and listen in for noises within a 20m radius. Phone the SMS Alert and wait for it to auto answer. It will auto answer automatically after two rings.

General definitions and advance information

**Advanced settings should only be changed if really needed.*

1	To request the status of the SMS Alert at any given time, SMS 1234 r or 1234 R	<p>The SMS Alert will respond with, for example, the following: INPUT ON B- - , #000 #87654321</p> <p>INPUT means: - Inputs 1 to 8 are enabled or disabled (except input 2) # 87654321 means: - All inputs are on. # 00000001 means: - Input 1 is on and the rest are off. #ABC means: - All relays are switched on. #A00 means: - Relay output A is switched on and the rest are off. B- - means: - Reports to one cellphone</p>
2	* Changing the security code 1234	<p>The default code is 1234 and can be changed through these steps:</p> <ol style="list-style-type: none"> 1. SMS 1234 04 to the SMS Alert to enable it to change the code. 2. Send 1234 CODE to the SMS Alert..The SMS Alert will SMS back: CODE ? 3. You can now SMS your selected 4 digit numeric code, e.g. 5678. This code is used as a prefix to operate all commands.
3	Panic Input	This input is always on and does not depend on the Key input.
4	Key Input	<p>This input enables or disables the 8 inputs. The Key Input is on by default because of the red loop wire.</p> <p>E.g: A relay output can be used to arm and disarm the SMS Alert from another cellphone.</p>
5	Green LED	Indicates when the SMS Alert is sending a SMS. The LED will stay on for 3 seconds. If the light is flashing, a problem exists. See troubleshooting.
6	Yellow LED	Indicates when B is active, e.g. the SMS Alert is now enabled. If B is the main user and it is off, then C , D and E won't work even if it was programmed.
7	Red LED	Indicates when the Key input is enabled. When the red LED is on, all 8 inputs are ready to be triggered. Input 2 is always enabled.
8	Triggering of inputs	The inputs are triggered negatively by default. To change to negative remove , SMS 1234 03 . The SMS Alert will reset and power up again. This implies for Version 7.3 and up.

9	Missed Call (only applicable to input 1 and user B):	Missed call function can be switched (toggled) on and off by sending: 1234 01 (this is off by default). Example : 1234 01. There must be a space between 1234 and 01. You will get the following SMS back: x?xx The return string format is: [SMS for Arm input Missed Call Relay switch for Arm input Input swap]
10	SMS function on/off - Arm/Disarm input only	The SMS function can be toggled on/off by sending a 1234 00 (this is on by default). This implies for Version <u>7.3 and up</u>.
11	Linking the Arm/Disarm input to switch relay C off (latch)	Send 1234 02 to toggle this mode. Relay C will latch when input 2 is triggered. This can be used to arm/disarm the SMS Alert via +12V via relay C to the Key input.
12	Loading airtime onto the SIM card	This can be done by internet (ABSA), via the keypad of the phone, or removing the SIM-card and putting it in your own personal phone using the voice method. Please disconnect the power from the SMS Alert when the SIM-card is removed
13	<i>* International code prefix use</i>	<i>SMS: 1234 05 to enable this. Consult your supplier. Please note that SMS Alert has been tested in South Africa only.</i>

Technical Specifications

1	Power supply	Minimum of 12 volt DC, 500mA (milliamps). Standby current is 30-50 mA. You must at least have a battery pack inline. Auxiliary outputs on panels do not provide sufficient power.
2	Number of cellphone users	1 - 4
3	Relay contacts	5A. Use additional external relays for more current. It is not recommended to run 220 V through the relays.
4	Inputs: 1 to 8, and Panic	This can be triggered by applying or removing negative power to the inputs of the SMS Alert, except the Key input (version 7.3 and up). Inputs 2 and 3 are dual state inputs. Inputs are buffered control for multiple triggers.
5	Key input	This must be positive 12VDC for inputs 1 to 8 to function. Exclude input 2 (Arm/Disarm).
6	Missed call function	Only applicable to input 1 .
7	Service provider	All cellphone networks (Version 7.2 and up). Consult your supplier for international usage.
8	SMS Alert security code	The code is programmable. The default is 1234 .
9	SMS characters	SMS Alert accepts all characters if they are all upper or lower case. E.g. 1234 A ON or 1234 a on .
10	Microphone	The microphone is mounted on the side of the box .The range is dependent on the environment in which it is installed in. The "listen in" function is tested and is audibly clear in a twenty square meter room.

11	Programmable strings	All the strings are programmable, except inputs 2 and 3.
12	Dual state inputs	SMS messages are send when the input is triggered by applying negative power, and again when the negative power is removed, e.g. input 2 and 3.
13	Interfacing to an alarm panel	Most alarm panels work on a negative closed loop principle. SMS 1234 03 to the SMS Alert to change it to trigger on a negative power remove (removing negative power from the input).

Fault finding / Troubleshooting

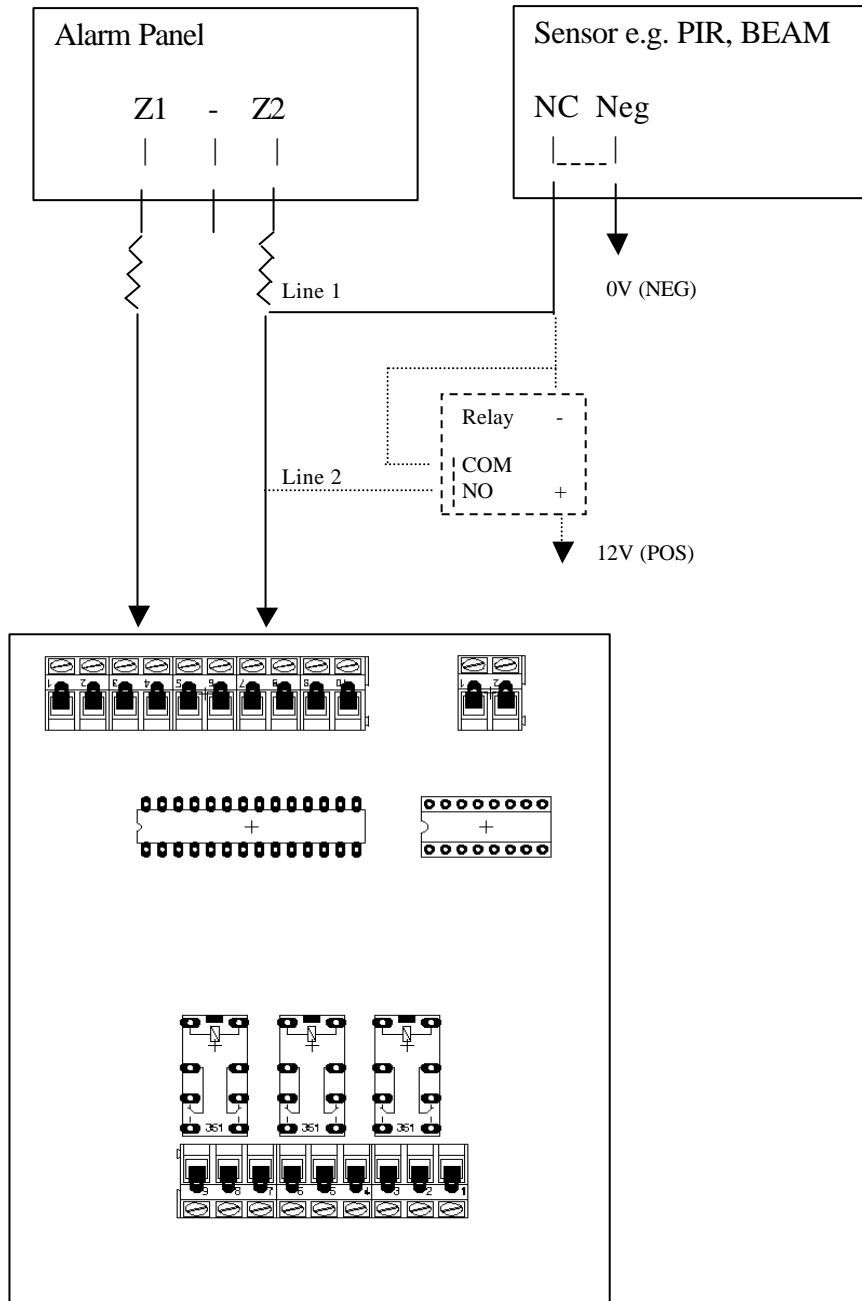
1	No cellphone signal	If there is no network signal, go to Menu, Settings, Phone Settings, Network Selection, and select Manual . Don't choose between MTN and Vodacom, just go back to the main menu, do the same thing over again and when you get to Network Selection, choose Automatic .
2	Flashing green LED	Re-power the SMS Alert system. This happens when the SMS Alert's power is connected (reset) three times in a short period. The automatic reset recovery is then disabled to protect the phone until power is removed and applied again.
3	Weak reception & the aerial touching wires	No wires must touch the aerial of the phone. The SMS Alert won't work inside a metal container . Use our magnetic external extension aerials for weak reception.
4	"Insert SIM-card" error	Remove the SIM-card and slightly twist the SIM-card contacts more upward with a small screwdriver.
5	Other equipment used in conjunction with SMS Alert	It is not recommended that other receivers, transmitters or equipment be kept inside the SMS Alert box.
6	Ad-hoc behaviour	Ensure that a very good / smooth Power Supply Unit (PSU), or power from the alarm panel is used where florescent tubes or machinery are not in the proximity of the SMS Alert. Auxiliary outputs on panels do not provide sufficient power.
7	The green light goes on but no SMS is received	Make a call from the SIM card to any number - this will release a call. You can also take out the SIM card and put it in another phone and follow the voice prompts.
8	Resetting the system	Never use the on/off button on the cellphone. Disconnect the power from the SMS Alert instead and reconnect.
9	Cellphone screen dim or not working	From time to time the screen might go dim. It will not prevent the unit from working. It can be fixed manually. Please contact us for support if it happens.

Thank you for using this product! Please note the following:

1. Additional requests can be emailed to info@smsalert.co.za.
2. For software/hardware updates, please visit www.smsalert.co.za.
3. **For support, phone us on 083 235 4916. Please note that your first point of call must be your supplier or installer. If they are unable to help you, we will be more than happy to assist.**

Interfacing SMS Alert 9 to an Alarm Panel (version 7.5 and up)

SMS Alert is not built for a specific alarm panel. It is a generic solution that works on a negative trigger principle. The following diagram is a proposed example of how it can be connected to an alarm panel:



1. The **Line 2** configuration is recommended for sensors that are further than 30m away from the alarm panel. (The ground voltage must be smaller than 0.5V.)
2. SMS **1234 03** must have been sent to invert the inputs of the SMS Alert 9 unit.

Disclaimer: PicC Electronics will not be held responsible for loss, damage or injury to any persons, company or legal entity using SMS Alert. It is also recommended that the SMS Alert is tested on a regular basis, for example by sending a status request to it.

[1,2,3,8] [7,4,5,6]