



# SMS ALERT

USER MANUAL (v 1.01)



## CONTROL IS JUST AN SMS AWAY

---

SMS Alert keeps you and your generator in constant contact by offering reliable bi-directional communication between the generator and you. SMS Alert is programmed and connected to your generator enabling you to monitor your generator's status and to control remote devices. It is a 9 input and 3 switched relay output unit. It notifies you instantly if the inputs are triggered by sending an SMS to your phone. In addition you have the functionality to remotely stop and start the generator if the need arises, ideal for units at home which may not need to run while you're at work.

## HOW DOES SMS ALERT WORK?

---

SMS Alert uses GSM technology to allow you to communicate with the generator and the generator to communicate with you. SMS alert as the title suggest uses the short message service (SMS) to send you information on the generator and in return you can remotely turn the generator on or off.

SMS Alert will instantly send you a SMS if one of the inputs is triggered. E.g.: "Low Oil Pressure". The SMS Alert system can send alerts to up to 4 unique numbers. The unit can be connected to your generator's battery which in turn will be connected to a charger to keep the battery topped up and the SMS Alert system functional all the time.

The inputs of the system are programmable. Each input sends a different SMS to your cellphone. This gives you complete control by enabling you to send an SMS back to the unit instructing it, for example, to open an electric gate enabling maintenance personnel to gain access to the generator.

## WHAT CAN YOUR SMS ALERT DO?

---

Monitor the status of your generator by receiving an SMS

- Generator Start Up
- Generator Shut Down
- Low Oil Pressure
- High Water Temperature
- Low Fuel (only available with optional fuel level switch on certain models)

Control remote systems by sending an SMS

## QUICK START UP STEPS

---

1. Insert SIM card into the phone. (We recommend [SIM Management by Track Fleet](#))
2. Connect to a battery (12V dc).
3. Type in the PIN code if applicable on the number pad.
4. Ensure the SIM card is activated.
5. Pin code request must be set to **OFF** if it is enabled (go to: Menu, Settings, Security Settings, Pin Code Request, Enter Pin Code).
6. 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.
7. Ensure Auto Answer is **ON**. This should be on by default.
8. Ensure that the SIM card has sufficient credit. Load airtime if necessary. If you are using the SIM Management system this is taken care of all the time.
9. Ensure the phone's inbox is empty. Once empty, the SMS Alert will automatically keep the inbox empty.
10. SMS **1234 b** from your cellphone to SMS Alert. Note the **yellow LED** will light up when B is active. This step notifies SMS Alert that it must report to the phone from which the SMS was send. **There must be a space between 1234 and b.**
11. The SMS Alert will respond by sending its status back to you (e.g. **INPUT ON B---,#000#0000000**). **Ensure that the character "B" appears in the SMS.**
12. Pulse input 1 with a negative trigger for about 50ms. The green LED will go on to indicate that a SMS is being send and you will receive an SMS **Generator Start** 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 SMS ALERT TO REPORT TO ADDITIONAL CELLPHONES

---

Adding additional cellphones to receive alerts is simple. SMS the generator using the password and the letter corresponding with that cellphone as per the table below. SMS is once to enable it and again to disable receiving notifications.

FROM	ACTION	TURN ON*	TURN OFF*
CELLPHONE 1	SMS	1234 b	1234 b
CELLPHONE 2	SMS	1234 c	1234 c
CELLPHONE 3	SMS	1234 d	1234 d
CELLPHONE 4	SMS	1234 e	1234 e

Default password is 1234. If this has been changed replace 1234 with your current password.

\*Ensure that there is a space between the password the letter.

Adding additional cellphone numbers for notifications will attract additional charges from your cellular operator. Each SMS will be charged dependant on the number of phones registered for notifications.



## HOW TO OPERATE THE RELAY OUTPUTS

---

The SMS Alert has three (3) outputs that can be utilised to remotely control items. Some examples of this can be to turn the generator on or off or open and close an electric gate or garage.

SMS your password (Default 1234) and the command to switch the relay outputs on and off.

E.g.: **1234 a on**. There must be a space between **1234**, **a** and **on**, or **1234**, **A** and **ON**.

FUNCTION	ACTION	TURN ON	TURN OFF
RELAY A	SMS	1234 a on	1234 a off
RELAY B	SMS	1234 b on	1234 b off
RELAY C	SMS	1234 c on	1234 c off
RELAY A, B and C	SMS	1234 all on	1234 all off
PULSE RELAY A (ONCE)	SMS	1234 ap	-
PULSE RELAY B (ONCE)	SMS	1234 bp	-
PULSE RELAY C (ONCE)	SMS	1234 cp	-
PULSE RELAY A (x10)	SMS	1234 app	-
PULSE RELAY B (x10)	SMS	1234 bpp	-
PULSE RELAY C (x10)	SMS	1234 cpp	-

# PROGRAMMING THE INPUT SMS STRINGS

---

You are able to program the SMS messages you would like to receive on your cellphone/s when the inputs of the SMS alert are triggered. Each input sends a different SMS to your cellphone(s).

The SMS must not be longer than 19 characters including spaces, or other punctuation.

Example: If you want input 1 to SMS “**Generator Start**” when the input is triggered:

1. SMS **1234 1** (space between password and Input number).
2. You will get the following SMS back: **Str 1?**
3. Then send the following SMS: **Emergency Stop** (Do not include 1234).
4. You will get the following SMS back: **Str1 OK.**

The input strings are pre-programmed as follow:

INPUT	DEFAULT	CHANGE
Input 1	General ALARM	1234 1
Input 2	Generator Start / Generator Stop	1234 2
Input 3	Power Loss / Power Restore	1234 3
Input 4	Low Oil	1234 4
Input 5	High Temp	1234 5
Input 6	Low Fuel	1234 6
Input 7	Low Battery	1234 7
Input 8	Mains On	1234 8
Input 9	Mains Off	1234 9

Default password is 1234. If this has been changed replace 1234 with your current password.

\*Ensure that there is a space between the password the letter.

## ADVANCED INFORMATION

\*Advanced settings should not be changed unless necessary. DO NOT CHANGE if you are unaware of the result or how to change the setting back.

<b>To request the status of the SMS Alert</b>  SMS 1234 r or 1234 R	The SMS Alert will respond with, for example, the following: <b>INPUT ON B---,#000#87654321</b>	
	<b>INPUT</b>	Inputs 1 to 8 are enabled or disabled (except input 2).
	<b>#87654321</b>	All inputs are on.
	<b>#00000001</b>	Input 1 is on and the rest are off.
	<b>#ABC</b>	All relays are switched on.
	<b>#A00</b>	Relay output A is switched on and the rest are off.
	<b>B---</b>	Reports to one cellphone.
<b>Changing the Password</b>	The default code is 1234 and can be changed through these steps:	
	1. SMS <b>1234 04</b> to the SMS Alert to enable it to change the code.	
	2. Send <b>1234 CODE</b> to the SMS Alert. The SMS Alert will SMS back: <b>CODE?</b>	
	3. You can now SMS your selected 4 digit numeric code, e.g. <b>5678</b> .	
		4. The code is used as a prefix to operate all commands.
<b>Input 9 (Panic)</b>	This input is always on and does not depend on the KEY input.	
<b>KEY Input</b>	This input enables or disables the 8 inputs. The KEY input is on by default because of the red loop wire.  E.g: A relay output can be used to arm and disarm the SMS Alert from another cellphone.	
<b>Green LED</b>	Indicates when the SMS Alert is sending an SMS. The LED will stay on for 3 seconds. <b>If the light is flashing, a problem exists.</b> See troubleshooting.	
<b>Yellow LED</b>	Indicates User B is active and the SMS Alert will only report to User B even if the other users are programmed and enabled.	
<b>Red LED</b>	Indicates when the <b>KEY input</b> is enabled. When the red LED is on, all 8 inputs are ready to be triggered. <b>Input 2 is always enabled.</b>	
<b>Triggering of inputs</b>	The inputs are triggered negatively by default. To change to <b>negative remove</b> , SMS <b>1234 03</b> . The SMS will reset and power up again	
<b>Missed Call (only applicable to input 1 and user B)</b>	Missed call function can be <b>switched (toggled)</b> on and off by sending <b>1234 01</b> (this is off by default).  E.g.: <b>1234 01</b> . There must be a space between <b>1234</b> and <b>01</b> . You will get the following SMS back: <b>x?xx</b> .  String Format [SMS for ARM input / Missed Call / Relay switch for Arm input / Input swap]	
<b>SMS function on/off – Arm/Disarm input only</b>	The SMS function can be toggled on/off by sending a <b>1234 00</b> (this is on by default).	

<b>Linking the Arm/Disarm input to switch relay C off (latch)</b>	Send <b>1234 02</b> to toggle this mode. Relay C will latch when input two is triggered. This can be used to arm/disarm the SMS Alert via +12V relay via relay C to the KEY input.
<b>Loading airtime onto SIM card</b>	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. <b>Please disconnect the power from the SMS Alert when the SIM card is removed.</b>
<b>International code prefix use</b>	SMS 1234 05 to enable this. Consult your supplier. <b>Please note that SMS Alert has been tested in South Africa only.</b>

## Technical Specifications

---

<b>Power Supply</b>	Minimum of 12Vdc, 500mA. Standby current is 30 – 50mA. You must at least have a battery pack inline. Auxiliary outputs on panels do not provide sufficient power.
<b>Number of cellphone users</b>	4
<b>Relay contacts</b>	5A. Use additional external relays for more current. It is not recommended to run 220V through the relays.
<b>Inputs: 1 to 9</b>	This can be triggered by applying or removing negative power to the inputs of the SMS Alert system, except the KEY input.  Input 2 and 3 are dual state inputs.  Inputs are buffered control for multiple inputs.
<b>KEY input</b>	This must be +12Vdc for inputs 1 to 8 to function. Exclude input 2 (Arm/Disarm).
<b>Missed call function</b>	Only applicable to Input 1.
<b>Service provider</b>	All cellphone networks. Consult your supplier for international usage.
<b>SMS Alert security code</b>	The code is programmable. The default is <b>1234</b> .
<b>SMS characters</b>	SMS Alert accepts all characters if they are all upper or all lower case. E.g. <b>1234 A ON</b> or <b>1234 a on</b> .
<b>Programmable strings</b>	All strings are programmable, except inputs 2 and 3.
<b>Dual state inputs</b>	SMS messages are sent when the input is triggered by applying negative power, and again when negative power is removed, e.g. input 2 and 3.

## TROUBLESHOOTING

---

<b>No Cellphone signal</b>	If there is not network signal, go to MENU, Settings, Phone settings, Network selection, and select <b>MANUAL</b> . Don't choose between MTN and VODACOM, just go back to Network selection, and choose <b>AUTOMATIC</b> .
<b>Flashing green LED</b>	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 the power is removed and applied again.
<b>Weak reception &amp; the aerial touching wires.</b>	No wires must touch the aerial of the phone. The SMS alert will not work inside a metal container. Use our magnetic external extension aerials for weak reception.
<b>Insert "SIM-card" error</b>	Remove the SIM card and slightly twist the SIM card contacts upward with a small screwdriver.
<b>Other equipment used in conjunction with SMS alert</b>	It is not recommended that any other receiver, transmitters or equipment be kept inside the sms alert box.
<b>Ad-hoc behaviour</b>	Ensure that very good/smooth Power Supply Unit (PSU), or power from the alarm panel is used where the florescent tubes or machinery are not in the same proximity of the sms alert. Auxiliary outputs on panels do not provide sufficient power.
<b>The green light goes on but no SMS is received</b>	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 prompt.
<b>Resetting the system</b>	Never use the on/off button on the cellphone. Disconnect the power from the SMS alert instead and reconnect.

# INSTALLATION

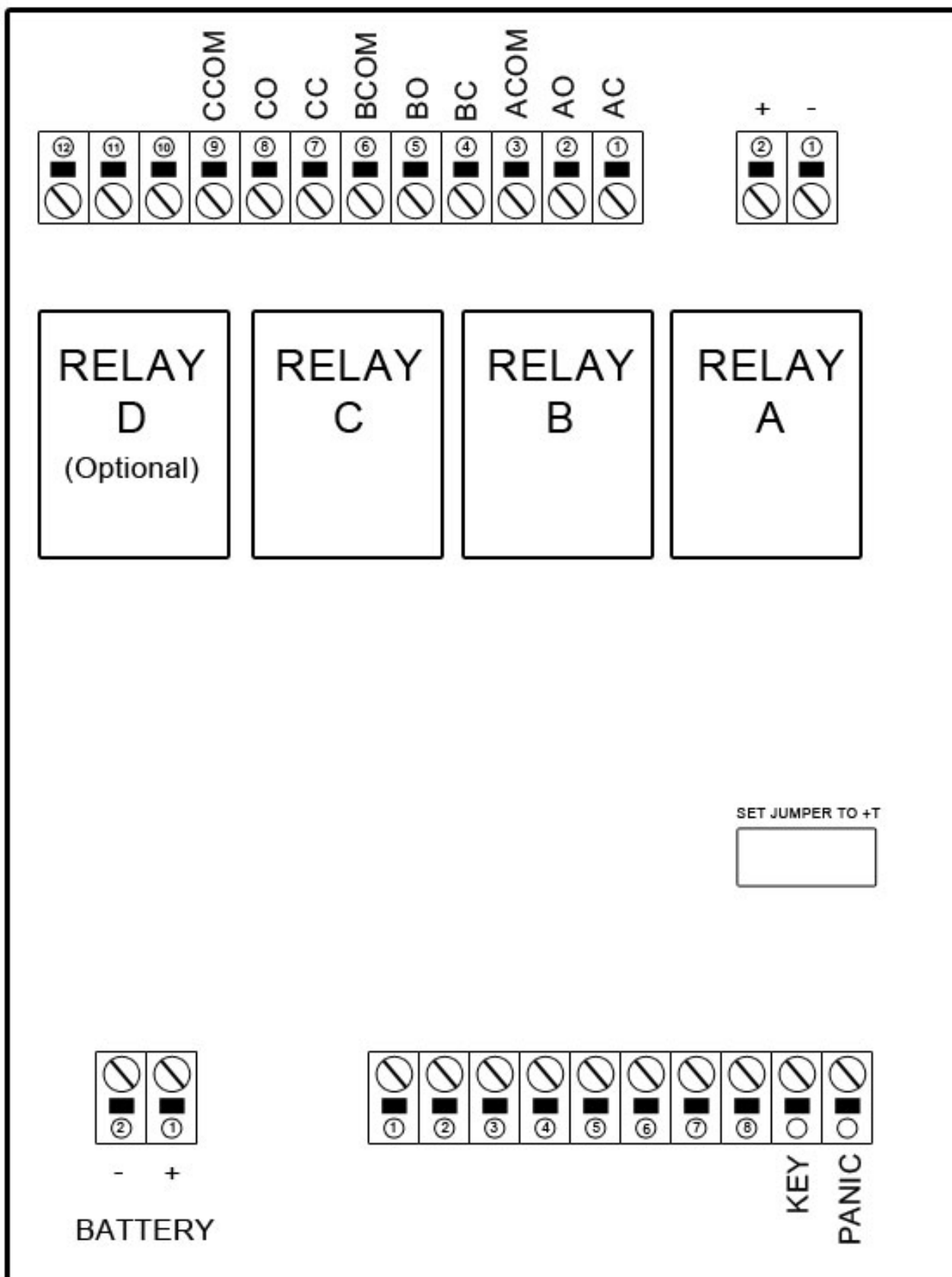
---

1. Always use a qualified installer.
2. Do not connect the power of the SMS alert to the auxiliary 12V power output.
3. It is best to connect the SMS Alert directly to, and within 1 meter from the 12V battery.
4. Try not to connect the SMS alert directly to the inputs, rather use interface relays where possible.
5. Install the SMS alert in an upright position. (Antenna facing upwards)
6. Magnetic antennas from 1m – 10m are available for better reception (this is seldom necessary)
7. Try to keep the SMS Alert at least 30cm away from any other equipment like receivers, transformers etc.
8. Don't use the ON/OFF switch on the cellphone. Rather reset the system by removing the 12V power.
9. The SMS Alert should work outside of SA. However, we cannot guarantee this.
10. Ensure Network Selection is set to Automatic.
11. This SMS alert works on a default negative trigger principle.
12. Input 2 is usually connected to an alarm receiver
13. Ensure that the SIM card is properly registered on the network by sending an SMS from the handset of the SMS alert, and then making a missed call to it.
14. Please Read the user manual carefully for further advice.
15. It is recommended that the SMS alert is tested on a regular basis, for example by sending it a status request.

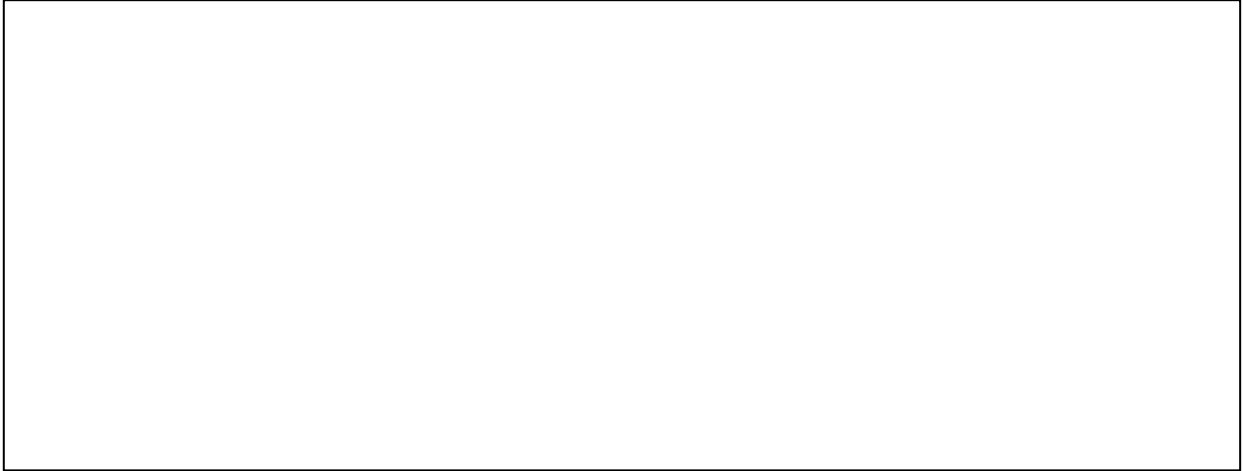
## DISCLAIMER:

Bundu Power will not be held liable for loss, damage or injury to any persons, company or legal entity using SMS alert. This product is used at your own risk and is subject to the availability of GSM signal in your area. This product does not warrant to provide 100% availability due to the varying environmental factors and should not be used for critical applications.

# DIAGRAM



Your Local Bundu Power Dealer is:



**SILENT DIESEL GENERATORS**

Copyright © 2012 Bundu Power Generators