

AD0450 RS232

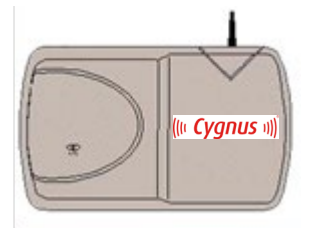
Model: AUTODI04-C



Please read these instructions carefully before you start the installation

Features

- Simple to program, install and use
- RS232 connection for 4 Trigger Inputs – Fire, Medical, Intrusion, Tamper
- 4 Outputs
- Outputs can be programmed as User activation only or User activation plus Trigger/Event follow activation (Output 1 now also follows Trigger Input 1 and Output 2 now also follows Trigger Input 2 etc)
- Outputs can be programmed as either toggle latching On/Off or 5 second momentary
- Users can activate outputs remotely via dial-in or SMS
- Different SMS sent upon each Trigger activation replicating Panel LCD information
- SMS can be sent to some or all of 50 phone numbers
- All programming done via APP or SMS message to Dialer
- SMS sent back to the programming mobile to confirm selections
- Built in memory for telephone numbers and programmed settings
- User can obtain Dialer signal strength via dial-in or SMS
- Power Fail SMS sent on external power source power failure
- 4 Digit programmable password for programming and dial-in
- Optional monthly test message or dial in to initiate an instant test message
- Trigger input runaway prevention - Option to limit number of SMS's to 50 in any 24-hour period
- Pay as you go SIM low credit indication via a forwarded SMS from the Service Provider
- 9V Battery back-up (not supplied)
- Dial in or send an SMS to request Dialer to send back it's essential programming details
- Dial in or send an SMS to request Dialer to send back it's current signal strength
- Turn on/off Dialer via SMS or dial-in plus password



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Kit Contents:

- 1 x GSM Auto Dialer
- 1 x Fixing Kit
- 1 x Installation and Programming Guide

Current Cons:

60-70mA Standby
130-220mA Dial Out
Excludes any Output Load

Operating Temp:

-20 to +70C

Dialer Installation

Tools required:

- Small cross head screw driver
- Large cross head screw driver
- Number 6 masonry drill bit
- Hammer drill
- Small hammer
- Pencil, ruler and spirit level

The Auto Dialer.

Important: before you install the Auto Dialer please take these into consideration.

1. Before you start to drill holes check for hidden wires and pipe work.
2. Keep the Auto Dialer out of reach of small children

How to install the Auto Dialer

1. Check that the location you wish to install the Dialer in is one in which you are able to obtain good network reception (test the SIM card that you are going to use in a mobile phone first for good reception). Do not install if reception is poor or patchy, choose another location.
2. Remove the screw from the SIM card cover on the rear of the unit and keep safe.
3. Slide back the SIM card holder and insert SIM card with the cut corner at the top, close SIM holder sliding back into the lock position.
4. Replace SIM card cover and small cross head screw.
5. Mark and drill two holes on a horizontal line 160mm apart.
6. Insert the masonry plugs; screw the two fixing screws in the plugs leaving 2mm protruding.
7. Run the dedicated RS232 cable from the Dialer to the Panel.
8. Connect the RS232 connector to that of the Control Panel.
9. If required, run a cable from the Dialer's outputs to the devices you wish to activate
10. Install a 9V back up battery to the connector inside the battery compartment (the alarm panel's back up battery would usually be used for mains failure back up). Once power has been connected, the Dialer is automatically On. The BLUE Led on the front the Dialer will start to flash, indicating that it is looking for a GSM connection. Once the Led turns to constant blue, it means a connection has been made and you can start to program the Dialer via SMS message or the APP as below. If the LED continues to flash blue, it means you do not have a signal. Re-locate the dialer to another location or change to another SIM provider. **IMPORTANT.** Once programming is completed, check again the signal strength via SMS or by calling the dialer and requesting an SMS with signal strength indication (see page 8 of this Manual)
11. If required, unscrew and replace the existing antenna with a remote antenna & cable.
12. Start to program the Auto Dialer via the APP or individual SMS message. The free APP is available on either the Google Play or Apple Store.



Note: Whilst the Dialer is being programmed via the APP, the LED will flash Blue. Please wait until it turns back to solid Blue before attempting to initiate an action (turn Dialer or an Output ON/OFF etc) via the APP.

Connections on the Auto Dialer

Triggers (via RS232 Connector):

Trigger 1 – Fire

Trigger 2 – Medical

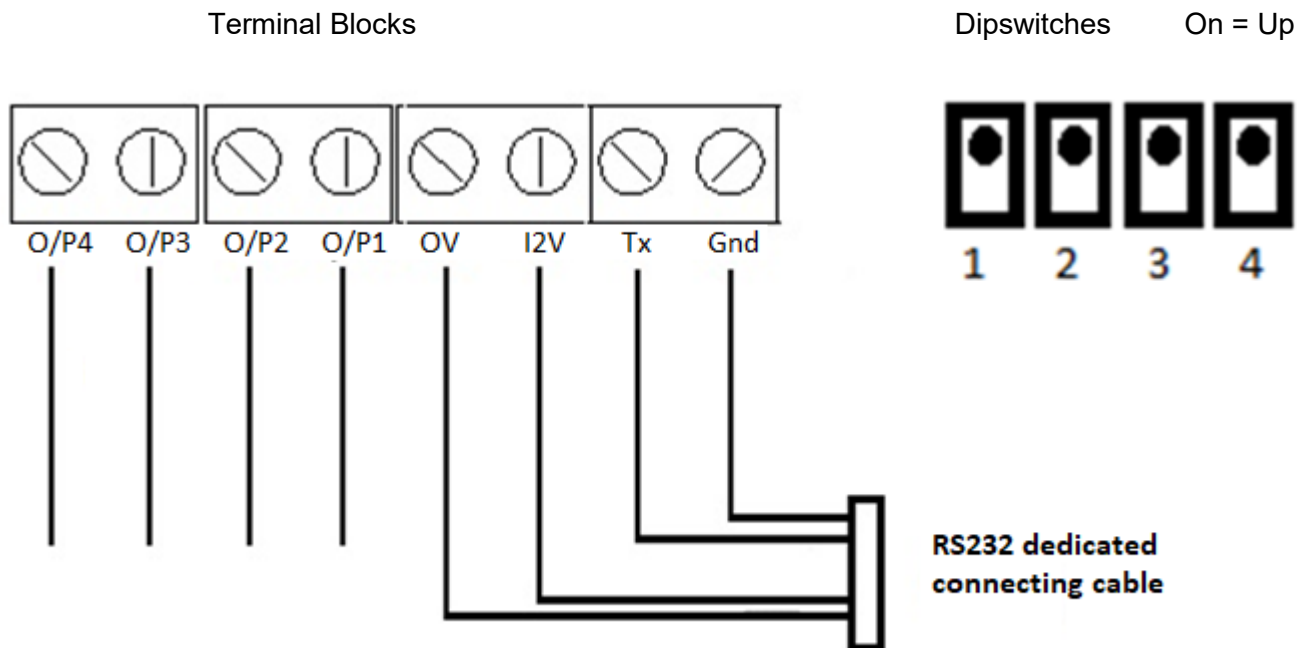
Trigger 3 – Intrusion

Trigger 4 - Tamper

The Output terminals are all switched positive (max 100mA). Connect the connected device's positive pin to the 12V terminal and the device's negative pin to the respective output terminal (O/P1 or O/P2)

The Power terminals are for connection to a 12V power supply via the dedicated RS232 cable

Fig 1



- Dipswitch 1 – Selects whether Output 1 is User only or Fire Event/Trigger Follow + User
- Dipswitch 2 – Selects whether Output 2 is User only or Medical Event/Trigger Follow + User
- Note: Outputs 3 (Intrusion) and 4 (Tamper) are ALWAYS Event/Trigger Follow + User
- Dipswitch 3 – Selects whether Outputs are Momentary or Toggle Latching
- Dipswitch 4 – Selects whether Limit of 50 SMS's sent per 24 Hour period

Programming Sections via Dipswitch


Dipswitch 1 – Selects whether Output 1 is User only or Event/Trigger Follow + User (**Default – User only**)

Dipswitch 2 – Selects whether Output 2 is User only or Event/Trigger Follow + User (**Default – User only**)

Dipswitch 3 – Selects whether Outputs are Momentary or Toggle Latching (**Default – Momentary**)


Dipswitch 4 – Selects whether Limit of 50 SMS's sent per 24 Hour period (**Default – No Limit**)

How to select whether an Output is Event (Trigger activated) as well as User Activated (Default is User Activated only): Dipswitch 1 selects Output 1, Dipswitch 2 selects Output 2

 If the dipswitch is in the ON position, it means that Output is User activated only (you can only dial in to activate the output – see further instructions later in this manual).

If the dipswitch is in the OFF position, it means that, as well as that Output being User activated, it will also follow the respective Input Trigger 1 therefore activate when that Input is triggered (Output 1 follows Trigger Input 1, Output 2 follows Input Trigger 2).


How to select whether the Outputs are Momentary or Toggle Latching (Default is Momentary): Dipswitch 3

 If the dipswitch is in the ON position, it means that the Outputs are 5 second momentary ON upon activation

If the dipswitch is in the OFF position, it means that they are toggle latching. The first activation of the output latches the output on, whilst the second turns it back off.

How to select whether, as an input “runaway” safety mechanism you wish to limit the number of SMS's the Dialer can send in any 24 HR period to 50

(Default No Limit): Dipswitch 4

 If the dipswitch is in the ON position, it means that there is no limit to number of SMS's the Dialer will send in any 24 Hr period.

If the dipswitch is in the OFF position, it means there will be a limit of 50 SMS's in any 24 Hr period.

Programming Sections via SMS

Section

1. Add or Delete Phone Numbers to which SMS's are sent to on trigger (Default – Memory empty)
2. Assign the 50 dial out Tel no's to triggers 1,2,3,4 together with the recipients of the optional monthly Self-Test Message (Default – All Tel no's assigned to all triggers and Test Message sent to all)
3. Change the 4 digit Password (Default 1234)
4. Select whether a monthly Self-Test Message is sent out (Default – No Test Message)
5. Forward any incoming SMS to the Dialer to Tel no 1 as programmed in section 1 (Default – All SMS's are forwarded)

NOTE: You can also program the Dialer either by sending individual SMSs programming (See “Programming the Dialer by SMS” section) or via the free “GSM Dialer” APP in either the Google Play or Apple Store



Section 1. How to Program Phone Numbers:

You can enter a maximum of 50 telephone numbers for the triggers, each number can be a maximum of 32 digits.



Quick guide. Text the Dialer with 1 2 3 4 p01 > Telephone No (on new line)

To programme the first telephone number in sequence, Text the Dialer with the message:

1 2 3 4 p01 (press "return" to get onto a new line)

Enter The Telephone Number you wish the SMS to go to (up to 16 digits) Press "send" to send the text

After a short delay, the Dialer's BLUE Led will flash briefly to indicate a text has been received.

To programme the second telephone number in sequence, Text the Dialer with the message:

1 2 3 4 p02 (press "return" to get onto a new line)

Enter The Telephone Number you wish the SMS to go to (up to 16 digits) Press "send" to send the text

After a short delay, the Dialer's BLUE Led will flash briefly to indicate a text has been received.

Repeat for all 50 numbers as required changing the number after "p. **Important: Remember to always use 2 digits** ("01", "02", "10", "20" etc).

Example:

1234p01

02075558990

The first number to receive an SMS will be 02075558990

The first number is also the number that will receive any incoming SMS received by the Dialer (if selected by programming section 6 as ON)

Section 2. How to Designate Telephone Numbers to TRIGs 1,2,3 and 4 + the Test Call:

Only these phone Numbers will have an SMS sent to it on activation of the respective trigger input. Note that the Factory Default Setting is that all numbers will be sent an SMS after activation of each trigger or a Test Call.



Quick guide. Text the Dialer with 1 2 3 4 i1 > Select Numbers 1-50 (on new line)

To select those numbers the Dialer will send an SMS to after input trigger 1 has been activated, Text the Dialer with the message:

1 2 3 4 i1 (press "return" to get onto a new line)

Enter those numbers 1 to 50 that you wish to call upon activation of input trigger 1. Press "send" to send the text. After a short delay, the Dialer's BLUE Led will flash briefly to indicate a text has been received.

Example:

1234i1

010231

Trigger 1

Only the first, second and thirty first numbers in sequence will be called upon activation of

To select those numbers the Dialer will send an SMS to after input trigger 2 has been activated, Text the Dialer with the message:

1 2 3 4 i2 (press "return" to get onto a new line)

Enter those numbers 1 to 50 that you wish to call upon activation of input trigger 2 and then press "send" to send the text. For example, if you enter 040510, it means only the 4th, 5th and 10th numbers in sequence will be called on activation of trigger 2.

Repeat for all 1 to 50 numbers as required changing the number after "i". **Important: Remember to always use 2 digits** ("01", "02", "10", "20" etc). You can also programme the numbers to be called on the Test Message by sending as i0

Example

1234i0

01

Only the first number will be called on the Test Message (if selected as ON)

Section 3. How to Change the User PASSWORD: (factory default 1234)



Quick guide. Text the Dialer with 1 2 3 4 > * > New password > * (on the same line)

Text the Dialer with the message:

1 2 3 4 * New 4 Digit Password * (all on the same line), then press “send” to send the text

After a short delay, the Dialer’s BLUE Led will flash briefly to indicate a text has been received.

Section 4. How to select whether the Dialer sends out a monthly Test Tone Call or SMS

(Default no Test Call or SMS).

Note: Dipswitch 5 selects whether it is a Test Tone or SMS.

Note also that you can initiate an instant Test SMS (SMS only, not Tone) by programming a Test SMS (see Section 3 above) and then calling the Dialer to initiate the Test (see “How to initiate an immediate Test SMS” below)



Quick guide. Text the Dialer with 1 2 3 4 t1 > 1 or 0

To program the Dialer to send a monthly test call to the number or numbers that have been programmed in Section 6 (select “0” for the Test Call), Text the Dialer with the message:

1 2 3 4 t1 Press “send” to send the text

t0 means No monthly Test call is sent

t1 means a monthly Test call is sent

After a short delay, the Dialer’s BLUE Led will flash briefly to indicate a text has been received.

Section 5. How to select whether you wish the Dialer to forward on to Tel No 1 any SMS

that it receives (Default Setting is that all SMS’s automatically forwarded). The reasons for this are a) because some service providers will send a pay as you go SIM card an SMS to warn when credit is low and b) each time you programme the dialer by SMS, Tel 1 will receive a confirmation SMS back with the setting:



Quick guide. Text the Dialer with 1 2 3 4 f1 > 1 or 0

To programme the Dialer to forward a received SMS message to Tel No 1, Text the Dialer with the message:

1 2 3 4 f1

f0 means Forwarding will be OFF

f1 means Forwarding will be ON

After a short delay, the Dialer’s BLUE Led will flash briefly to indicate a text has been received.

How to return the Dialer to Factory Default Settings



Quick guide. Text the Dialer with 1 2 3 4 > * 1 2 3 4 > * (on new line)

Text the Dialer (telephone number of the SIM card that has been installed) with the message:

1 2 3 4 * (press “return” to get onto a new line)

1 2 3 4 * then press “send” to send the text

After a short delay, the Dialer’s BLUE Led will flash briefly to indicate a text has been received

How to turn the Dialer On/Off remotely

How to Turn the Auto Dialer ON:

Default is ON. That means the Dialer will always be active or ON (waiting for a trigger input) when power is first applied or re-applied to it. The following section therefore only applies if the Dialer has been turned OFF for any reason and you wish to turn in ON again.



From a Telephone: Quick guide: Call the Dialer and Press 1 2 3 4 > #

1. Check that at least one SMS and one phone number has been programmed into the Auto Dialer.
2. Call the Dialer (telephone number of the SIM card that has been installed). You will hear a long “beep” to indicate that the Dialer has answered.
3. Press 1 2 3 4 (4 digit code) followed by the # key. You will hear 2 beeps to indicate the Dialer has been turned on and the Dialer will automatically hang up



From a Text Message: Quick guide. Text the Dialer with 1 2 3 4 > #

1. Check that the voice message and at least one phone number has been programmed into the Auto Dialer.
2. Text the Dialer (telephone number of the SIM card that has been installed) with the message 1 2 3 4 # After a short delay, the Dialer’s BLUE Led will flash briefly to indicate a text has been received.

How to Turn the Dialer OFF. It must then be re-set to the "ON" mode as above:



From a Telephone: Quick guide: Call the Dialer and Press 1 2 3 4 > *

1. Call the Dialer (telephone number of the SIM card that has been installed). You will hear a long “beep” to indicate that the Dialer has answered.
2. Press 1 2 3 4 (4 digit code) followed by the * key. You will hear 4 beeps to indicate the Dialer has been turned off and the Dialer will automatically hang up



From a Text Message: Quick guide. Text the Dialer with 1 2 3 4 > *

Text the Dialer (telephone number of the SIM card that has been installed) with the message 1 2 3 4 * After a short delay, the Dialer’s BLUE Led will flash briefly to indicate a text has been received.

How to initiate an immediate Test SMS from the Dialer



From a Telephone: Quick guide: Call the Dialer and Press 1 2 3 4 > 5

1. Check that at least one phone number has been programmed into the Auto Dialer (programming section 1)
2. Call the Dialer (telephone number of the SIM card that has been installed). You will hear a long “beep” to indicate that the Dialer has answered.
3. Press 1 2 3 4 (4 digit code) followed by the 5 key. The Dialer will hang up and those telephone numbers selected in section 2 to receive the Test Call (default all numbers) will then shortly receive a Test SMS

How to turn the Outputs On and Off

The Dialer has 4 outputs, the first 2 of which that can be programmed as:

1. **User only** (default setting) or **Event Follower + User**. “Event Follower” means output 1 activates when trigger 1 is activated and output 2 is activated when trigger 2 is activated. Program Output 1 as an Event Follower by selecting dipswitch 1 as Off and Output 2 as an Event Follower by selecting dipswitch 2 as Off.
2. **All 4 Outputs can be programmed as either a 5 second momentary output** (default setting) or a **toggle latching output**. “Toggle Latching Output” means that the output remains ON until a further command turns it OFF again. Program the Outputs to both be Toggle Latching Outputs by selecting dipswitch 3 as Off

User Activation of the Outputs



Quick guide: Text the Dialer with 1 2 3 4 > 0 > 1 (the no of the output)

Text the Dialer (telephone number of the SIM card that has been installed) with the message 1 2 3 4 0 1 (1 being the number of the Output you wish to turn ON). After a short delay, the Dialer’s BLUE Led will flash briefly to indicate a text has been received.



From a Telephone: Quick guide: Call the Dialer and Press 1 2 3 4 > 0 > 1 (the no of the output)

1. Call the Dialer (telephone number of the SIM card that has been installed). You will hear a long “beep” to indicate that the Dialer has answered.
2. Press 1 2 3 4, followed by 0, followed by the number 1-2, being the number of the output you wish to turn ON (Output 1 in this example)
3. If the output is a momentary output, it will remain active for the time which it has been programmed as remaining on for (1 to 99 seconds, default 5 seconds). If the output has been programmed as a toggle latching output, it will remain on until turned off.
4. To turn a Latching output off, Call the Dialer, Press 1 2 3 4, followed by 0, followed by the number 1-2, being the number of the output you wish to turn OFF

How to check Signal Strength



Quick guide. Text the Dialer with 1 2 3 4 > signal > carriage return

Check that Tel No 1 has been programmed into the Auto Dialer (programming section 1) and then Text the Dialer (telephone number of the SIM card that has been installed) with the message:
1 2 3 4 signal (press “return” to get onto a new line) then press “send” to send the text

After a short delay, the Dialer’s BLUE Led will flash briefly to indicate a text has been received and will then send Tel No 1 an SMS with a number between 0 and 7. The strongest reception quality is 7. **The Dialer should only be installed in a location where the signal strength display shows 2 or above.** Move the Dialer to a different location if the number is 1 or below.

IMPORTANT: If you want the SMS to be sent back to the mobile number sending the Signal Strength request, rather than Tel No 1, text the Dialer: 1 2 3 4 SignalEx (press “return” to get onto a new line)



From a Telephone: Quick guide: Call the Dialer and Press 1 2 3 4 > 7

1. Check that Tel No 1 has been programmed into the Auto Dialer (programming section 1)
2. Call the Dialer (telephone number of the SIM card that has been installed). You will hear a long “beep” to indicate that the Dialer has answered.
3. Press 1 2 3 4 (4 digit code) followed by the 7 key. The Dialer will hang up and send Tel No 1 an SMS with the number 1 to 7.

How to check the Dialer's Programmed Sections



Quick guide. Text the Dialer with 1 2 3 4 > settings > carriage return

Check that Tel No 1 has been programmed into the Auto Dialer (programming section 1) and then Text the Dialer (telephone number of the SIM card that has been installed) with the message:

1 2 3 4 *settings* (press "return" to get onto a new line) then press "send" to send the text

1. After a short delay, the Dialer's BLUE Led will flash briefly to indicate a text has been received and will then start sending SMS's to Telephone Number 1 with the following information:

p1	
p2 etc	The telephone numbers that have been programmed to dial out to in sequence
i1	
i2 etc	The telephone numbers that have been assigned to each input trigger to dial out to
s1	
s2 etc	SMS's that may have been entered for any trigger input
t0	
t1	Whether a monthly test call has been activated (t0 = no monthly test call, t1 = monthly test call)
f0	
f1	Whether SMS forwarding has been activated (f0 = no monthly test call, f1 = monthly test call)
l1	
l0	Whether the Dialer has been limited to 50 SMS's within any 24 hour period

IMPORTANT: If you want the SMS to be sent back to the mobile number sending the Settings request, rather than Tel No 1, text the Dialer: 1 2 3 4 *SettingsEx* (press "return" to get onto a new line)



From a Telephone: Quick guide: Call the Dialer and Press 1 2 3 4 > 1

2. Call the Dialer (telephone number of the SIM card that has been installed). You will hear a long "beep" to indicate that the Dialer has answered.
3. Press 1 2 3 4 (4 digit code) followed by the 1 key. The Dialer will automatically hang up and then start sending SMS's to Tel No 1 with information as above

Power Fail SMS

A "Power Fail" SMS will automatically be sent to Telephone No 1 (as programmed) if the Dialer experiences a power fail of more than 90 seconds from its external power supply. Any removal of power for less than 90 seconds will be ignored.

Important: In order for the Dialer to send a Power Fail SMS, a good 9V PP3 battery must be installed in the Dialer's battery compartment.

How to Change the back-up battery (if used):

Important: It is recommended to change the back-up battery pack at least once a year even if not low.

1. First make sure that the Auto Dialer is OFF. Then release it from the wall.
2. Remove the battery door and remove the old battery. Re-insert a new 9V BATTERY (Lithium preferred).
3. Re-fit the battery door and hang the Auto Dialer back onto the wall.

Note of caution

1. Do not mount the Auto Dialer in areas that are exposed to extreme heat or moisture, as this could adversely affect the performance of the system.
2. Use only a damp cloth and general household cleaning agent to wipe the unit clean. Do not use turpentine, thinner, gasoline or similar substances to clean the Dialer.

Trouble Shooting

Q	I have connected the Dialer to an Alarm Panel, but it is not dialing out
A	<p>Check the following carefully.</p> <ul style="list-style-type: none"> i) Does the Dialer have a 12V supply – either from the panel or via a 500ma 12V mains adaptor? Is the Blue LED alight? ii) Does the Dialer have a SIM card fitted? iii) Have you fitted your SIM card correctly? The SIM card must be fitted firmly into the holder in the correct orientation. iv) Have you made the correct connections to the Trigger inputs (either switched negative or relay)? v) Is a network signal being received? Put the SIM card into a mobile phone to check and also call the dialer to initiate a signal strength SMS (see page 8 above). vi) Is the Dialer On/Armed? Remember that although it goes in the ON mode automatically after power is applied or re-applied, you will need to turn it back ON again if you have turned it OFF for any reason. vii) Has your SIM card been disabled by the Network Provider? Most Pay as you go SIM cards will be disabled after a certain period if they are inactive. Some Network Providers now also require voice usage rather than text usage to continue activation. Check first whether the Network Provider you are using accepts a regular text message to continue activation and over what period of time. Then, ensure the Monthly Test SMS option has been enabled.

Q	The Dialer's input has been activated correctly. However, no SMS's are being received by the numbers it is meant to be dialing.
A	<p>Check the following carefully.</p> <ul style="list-style-type: none"> i) Have you activated the correct Dialer trigger? You may have programmed different numbers to call out for the different triggers. ii) Have you entered the correct telephone number to call and/or entered a wrong digit by mistake? iii) Have you programmed the telephone numbers to be called (Section 1 above) always using 2 digits after the "p" (p01, p02 etc)? iv) If you think the Dialer should be calling a particular number, have you actually de-selected that number for that trigger by mistake? Call the Dialer, get it to send an SMS with details of all programming and check carefully. In section 2 (i1, i2 etc), you should see various numbers between 1 and 9. If a number is not there, it means that sequential number is <u>not</u> being dialed for that trigger. <u>A number must be there in i1, i2 etc. if it is being dialed for that trigger.</u> v) Have you programmed at least one telephone number and one SMS to the Dialer? vi) Is the Dialer in a location where it can obtain a good GSM signal? Check the Network signal strength by interrogating the Dialer and/or removing the SIM card and checking signal strength in a mobile phone. Move the dialer to a different location in the premises or use an alternative network SIM card. vii) Have you installed the Dialer in a metal cabinet and therefore shielded it from the GSM network? Re-locate the Dialer or, alternatively, unscrew the existing antenna and replace it with a remote antenna plus cable. viii) Carefully clean both the gold section on the rear of the SIM card and the gold pins in the SIM card holder
Q	Tel No 1 has not received a "power fail" SMS after external power was removed
A	<p>Check the following carefully.</p> <ul style="list-style-type: none"> i) Have you installed a 9VPP3 back-up battery inside the battery compartment ? Does this battery still have good voltage ? ii) Have you waited a full 2 minutes after power fail to receive the text ? iii) Have you programmed a Tel No 1 (programming section 1) ?
Q	I have programmed the Dialer to send out monthly Test Calls, but none are being received
A	Check whether you have assigned a telephone number/s to receive a Test Call (programming section 2).



BULL PRODUCTS



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