

The *Winderest* Remote Alarm for Passenger and Goods Lifts with Optional BS EN81-28 & BS EN81-70

1. Identify the Equipment and carry out a Risk Assessment before installation

| | | | | |
|--------------|-----------------------------|-------------------------|---------------------------------|-------------------------------|
| AD1000EN-1BR | Main Unit EN1 | Speaker Box in Lift Car | | |
| AD1000EN-3BR | Main Unit EN1 | Speaker Box in Lift car | Top of Car 1 Button Speaker box | Lift Pit 1 button Speaker box |
| AD1000EN-4BR | Main Unit EN4 with Intercom | Speaker Box in Lift car | Top of Car 2 Button Speaker box | Lift Pit 2 button Speaker box |

| | | | | |
|-----------------|--|--|---------------------------------|-------------------------------|
| AD1000EN-1BR-28 | Main Unit EN1 with ALARM Filter | Speaker Box in Lift Car with Pictogram | | |
| AD1000EN-3BR-28 | Main Unit EN1 with ALARM Filter | Speaker Box in Lift Car with Pictogram | Top of Car 1 Button Speaker box | Lift Pit 1 button Speaker box |
| AD1000EN-4BR-28 | Main Unit EN4 with Intercom & ALARM Filter | Speaker Box in Lift Car with Pictogram | Top of Car 2 Button Speaker box | Lift Pit 2 button Speaker box |

BS EN81-28 & BS EN81-70 may require equipment and facilities in addition to the standard equipment listed above. Example: Inductive Loop Amplifiers, Speech Synthesis units etc. The rescue service operator i.e. recipient of the Emergency calls from autodialler should have a telephone system which can generate DTMF tones in accordance to British Standards.

Non-Standard or Special Installation with other equipment go to Section 2.1

Common to all types of equipment

The Phone line (**Analogue on 2 wires**) goes to the Main unit and it is thereafter switched to any specific Speaker box assembly. Speech synthesis prompts are provided to assist and reassure the passenger; hence all wires have to be connected.

Main voltage (230V ac) is used and all normal safety considerations must be given in accordance with **current IEEE regulation**. The product complies with EMC regulations and BT Approvals. (Use Screened & Twisted Cable for all installations. However, acceptable results have been obtained using standard cable.) These instructions are “Fast Track” information for “Qualified Lift Engineers” and further information can be obtained from our offices on request.

WARNING

If SP Bit 2 is set to a 1 [YES], the Automated test facility will be enabled i.e. a call to the 5th telephone number will be made after 70 hours, and if not responded to, a call will be made Every 15 minutes for up to 6 times, and then again after 70 hours. During these attempts the programmer will display ‘C/S Busy’ to indicate that Central Station is not answering a call.

1.1 AD1000EN-1 Installation

Main Unit Installation in Motor/Pump room

| | |
|---------------|--|
| Advantages | -Easy to Work with -Customer can change Phone numbers -Mains and Phone Line access |
| Disadvantages | -6 wires required to Lift car (9 wires for AD1000EN-1-28) -Have to Extend Speaker box cable -May require terminal blocks |

Main Unit Installed On Top of the Lift Car

| | |
|---------------|--|
| Advantages | -2 wires required to Motor/Pump room -Installer has access to equipment only -Plug & Socket installation |
| Disadvantages | -Cramped working conditions -Connecting to Mains |

Connection

See Diagram and Programme as required.

2.1 Special Installations

These types of installations include the installation of the AD1000EN range of products with other facilities. Such requirements may include Hand-winding Intercom facility, Fire-fighting Intercom and Evacuation facility.

In all cases, it is recommended that the AD1000EN Main unit is installed in the Motor/Pump room, as interconnecting cables to and from the additional equipment will be most probably required.

Appropriate instructions will be provided for the installation of the additional equipment, which is to be used with these instructions.

3.1 AD1000EN-3 Installation

Main Unit Installation in Motor/Pump room

| | |
|---------------|--|
| Advantages | -Easy to Work with -Customer can change Phone numbers -Mains and Phone Line access |
| Disadvantages | -6 wires required to Lift car Speaker (9 wires for AD1000EN-1-28) -Have to extend Lift Speaker cables -4 wires required for Top of car Speaker -4 wires required for Pit Speaker box -Will require terminal blocks |

Main Unit Installed On Top of the Lift Car

| | |
|---------------|--|
| Advantages | -2 wires required to Motor/Pump room -Installer has access to equipment only -Plug & Socket installation -May be able to install Pit speaker box on the Bottom of the Lift car rather than in the Pit. (Seek advice). |
| Disadvantages | -Cramped working conditions -Connecting to Mains -May require 4 additional wires, via the Motor/Pump room, if the Pit Speaker box is to be installed in the Pit |

Connection

See Diagram and Programme as required.

4.1 AD1000EN-4 Installation

Install the Main Unit in the Motor/Pump room

Install the Main unit near or on the Lift Controller, so that the intercom facility can be operated Hand-winding the passenger etc.

See Drawing and Programme as required.

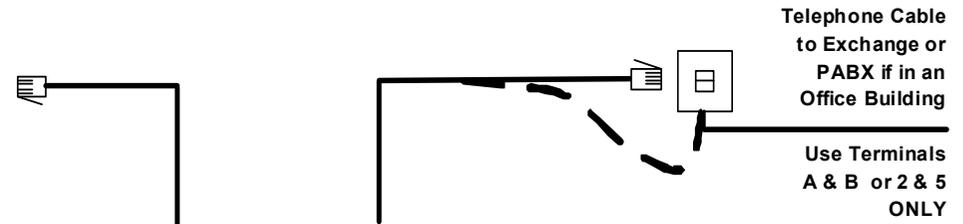
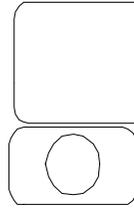
5.1 Pictogram Connection

1. Connect the "RED" wire from speaker box to the "+" terminal on the autodialler unit.
2. Connect the "YELLOW" wire from speaker box to the "Y" terminal on the autodialler unit.
3. Connect the "GREEN" wire from speaker box to the "G" terminal on the autodialler unit.
4. Connect a loop/link between "PF" and "-" terminals on the autodialler unit.

NB:
If the main Unit is mounted in the Motor/Pump room, 9 way Trailing cable will be required.

If the Main unit is mounted on the Lift car, 2 way trailing cable will be required.

IMPORTANT:
Backup Battery MUST be connected the correct way around. If not, the PCB tracked Fuse will blow.



If the Main unit is Mounted on the Lift car, extend only the Phone line coming in, using Terminal blocks (Red & White or Yellow & Black wires) or a BT Socket Terminals 2 & 5

Trailing Cables Screened and Twisted if Possible

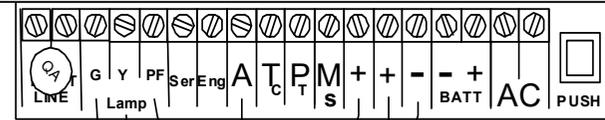
4 Way Cable All wires must be used

If the Main unit is Mounted in the Motor/Pump Room, Extend all the Speaker box cables using 4 Terminal Blocks

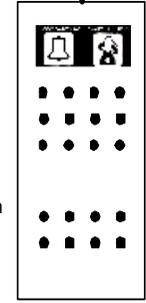
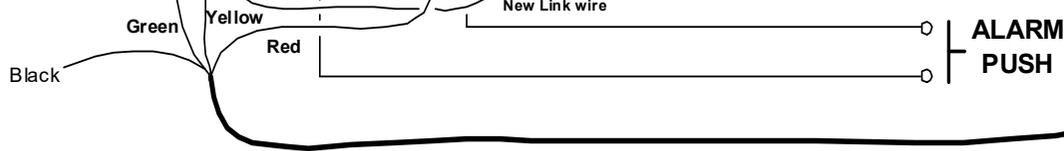
Use the Voltage Free Contacts (Max Load 500 mAmp 24V) to switch ON/OFF the Lamp/LED in the ALARM push.

PF & Y Make when ALARM Activated
PF & G Make when ALARM Acknowledge
(By Called Person pressing a Star (*) on his phone.)

15 way D Socket for the Programmer



Push Button to Hold Down when Recording Lift Location



Speaker Box in Lift car with EN70 Pictogram

White Cable for Pictogram and/or Inductive Loop

Wiring of the AD1000EN-1R

Drawing: EN-1 drawing 24/06/04

Windcrest

Tel: 0208 795 0333
Fax: 0208 795 0444

Connect the lead with the BT Plug into the phone socket of the Building's phone system. (The phone line Must be on 2 wires analogue system)

IMPORTANT:

Backup Battery MUST be connected the correct way around. If not, the PCB tracked Fuse will blow.

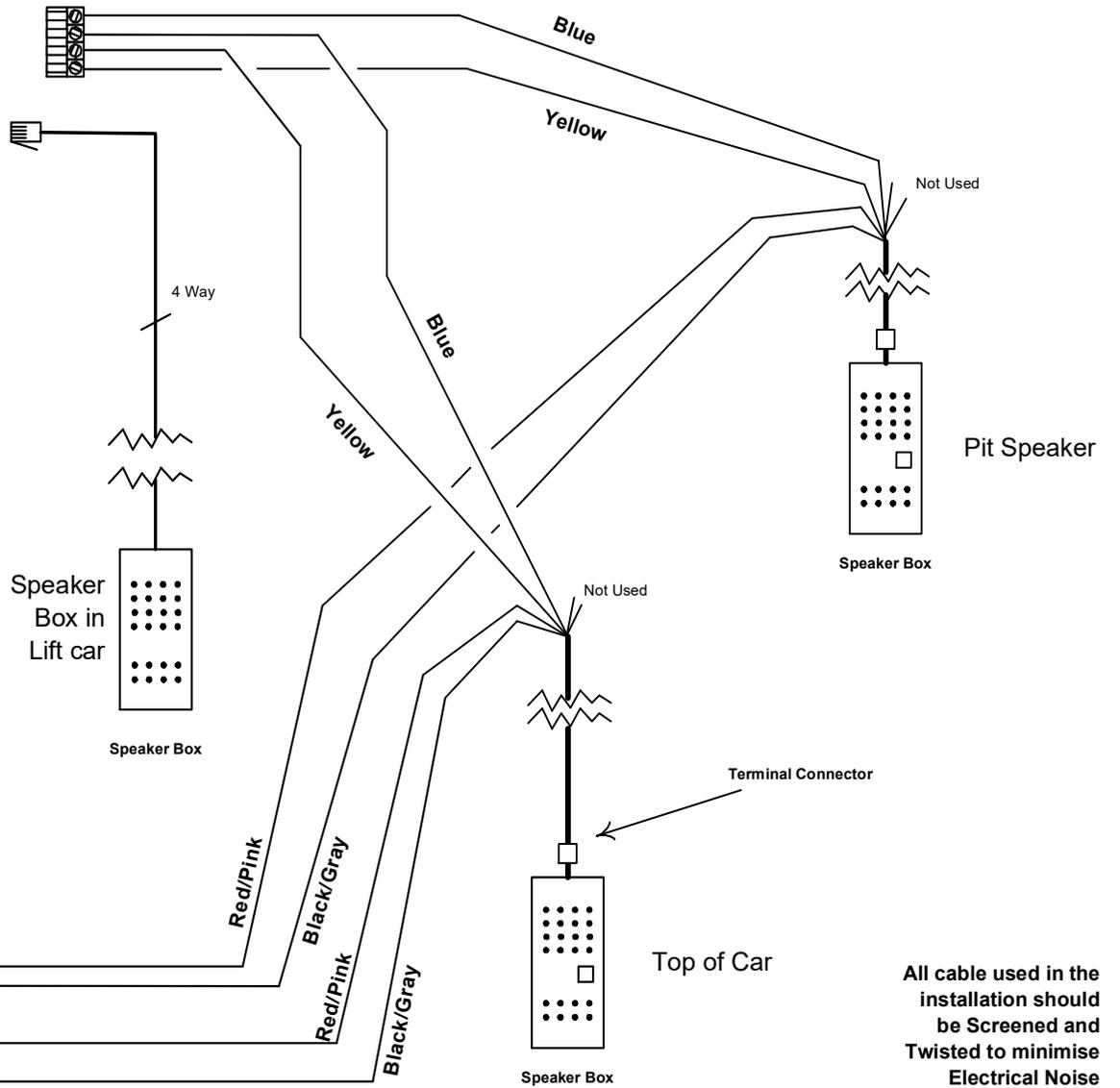
12V ok LED

"System Ready"

15 way D Socket for the Programmer

For Pictogram wiring follow AD1000EN-1R Drawing

ALARM PUSH



All cable used in the installation should be Screened and Twisted to minimise Electrical Noise

Wiring of the AD1000EN-3

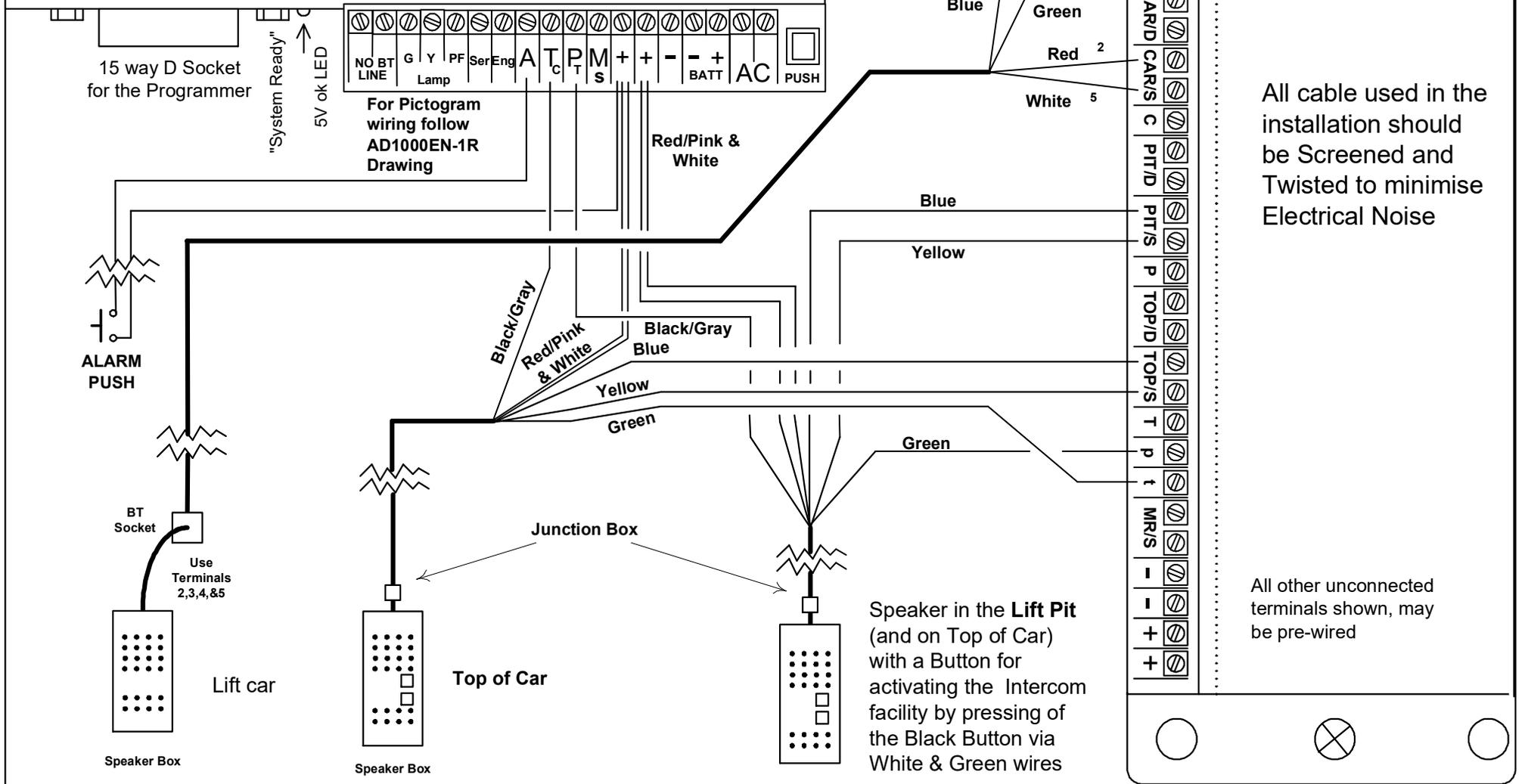
Drawing: enint3 12/04/03

Windercrest

Tel: 0208 795 0333
Fax: 0208 795 0444

Connect the lead with the BT Plug into the phone socket of the Building's phone system. (The phone line Must be on 2 wires analogue system)

IMPORTANT:
Backup Battery MUST be connected the correct way around. If not, the PCB tracked Fuse will blow.



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Wiring of the AD1000EN-4

Drawing: enint_4 20/03/03

Winderest

Tel: 0208 795 0333
Fax: 0208 795 0444

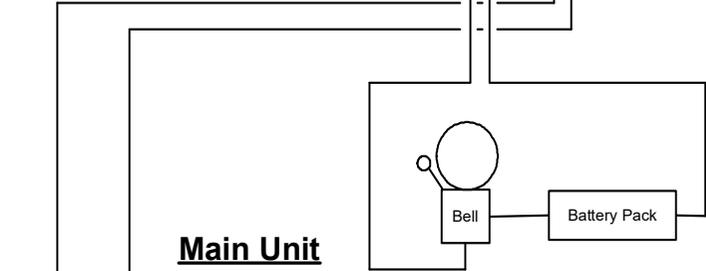
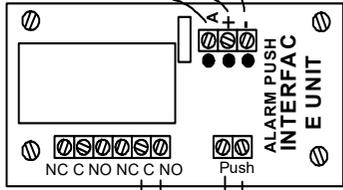
Communication Interface Unit

IMPORTANT:
Backup Battery MUST be connected the correct way around.
If not, the PCB tracked Fuse will blow.

15 way D Socket for the Programmer



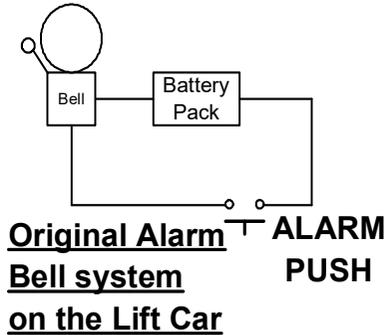
Normally Open ALARM PUSH



Main Unit

Autodialler installed on the Lift car

ALARM PUSH



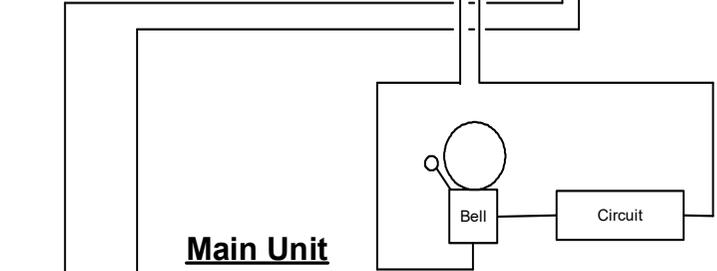
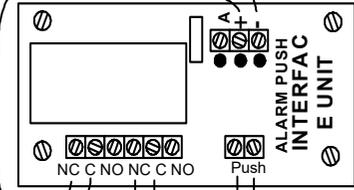
Communication Interface Unit

IMPORTANT:
Backup Battery MUST be connected the correct way around.
If not, the PCB tracked Fuse will blow.

15 way D Socket for the Programmer



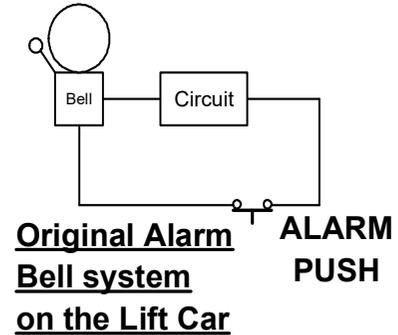
Normally Closed ALARM PUSH



Main Unit

Autodialler installed on the Lift car

ALARM PUSH

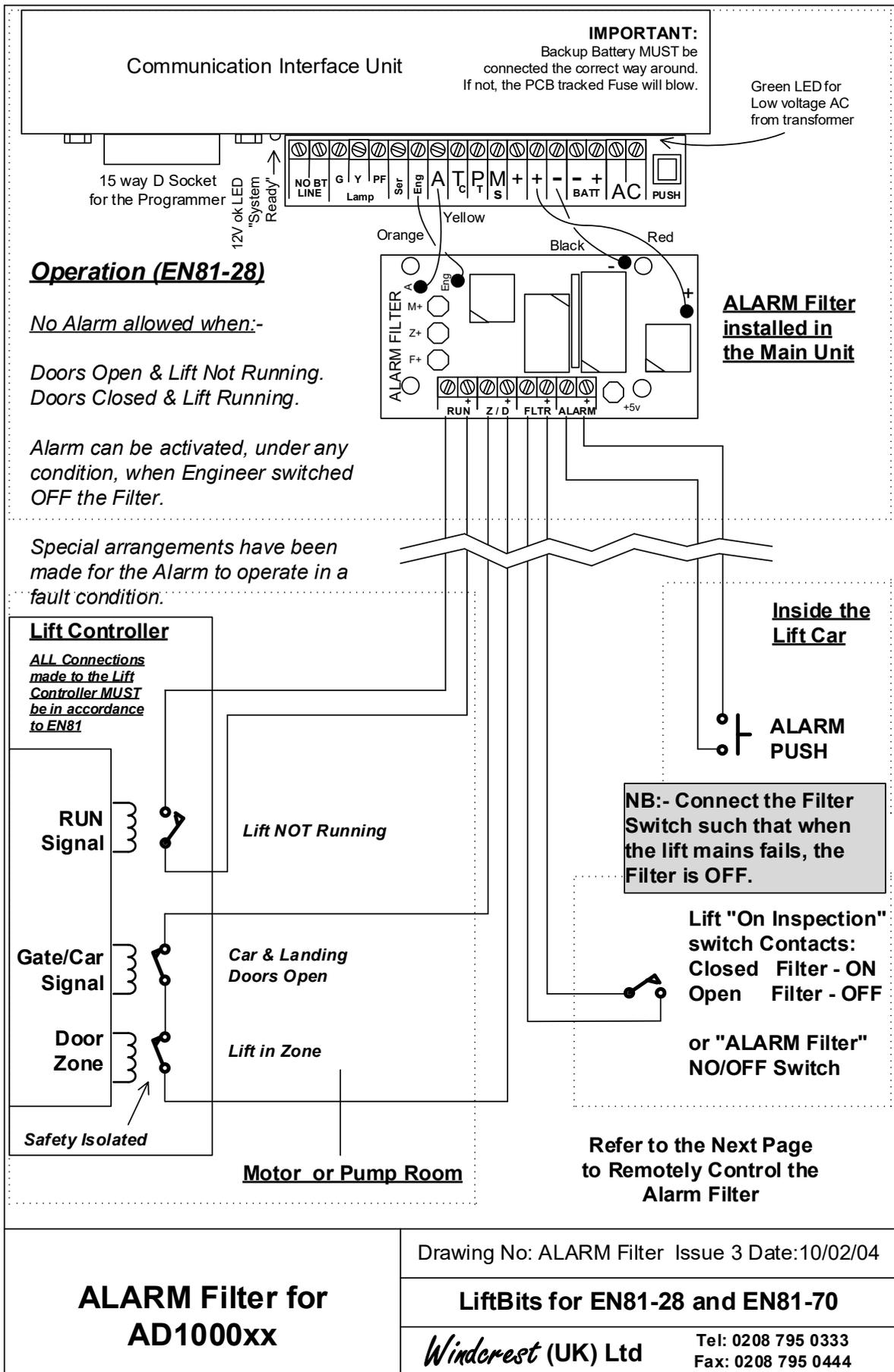


Wiring of the NIF10 in N/O or N/C Alarm Push

Drawing: NIF 10en NEWNV & NO 6/10/04

Windcrest

Tel: 0208 795 0333
Fax: 0208 795 0444



ALARM Filter for AD1000xx

Drawing No: ALARM Filter Issue 3 Date:10/02/04

LiftBits for EN81-28 and EN81-70

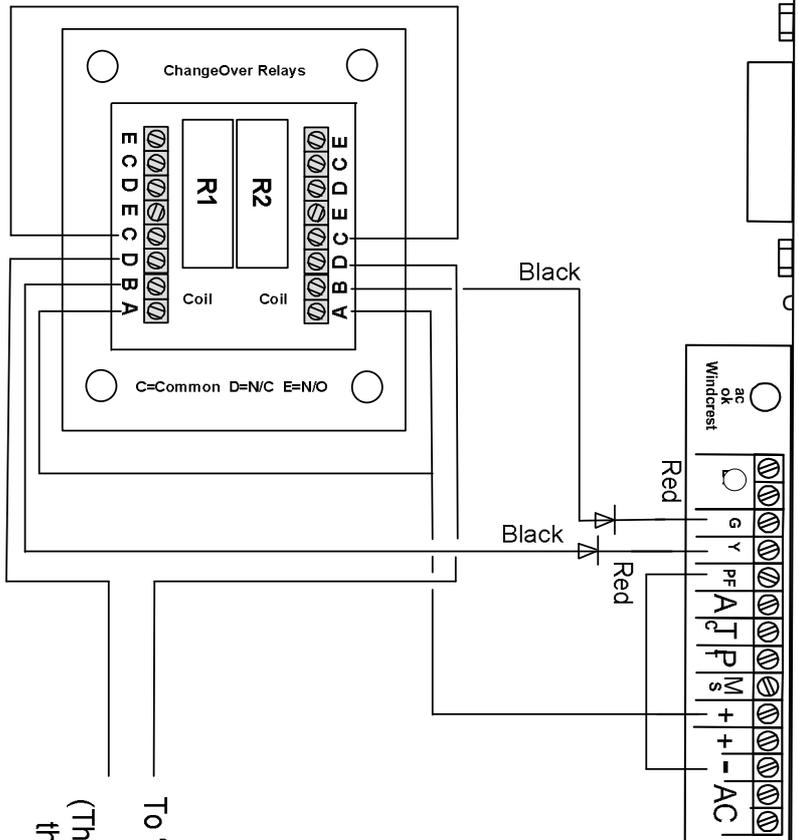
Windcrest (UK) Ltd

Tel: 0208 795 0333
Fax: 0208 795 0444

AD1000EN-XR

IMPORTANT:
 Backup Battery **MUST** be connected the correct way around. If not, the PCB tracked Fuse will blow.

Connect the lead with the BT Plug into the phone socket of the Building's phone system. (The phone line Must be on 2 wires analogue system)



To "FLTR" contacts of the Windcrest Alarm Filter Board
 (These contacts will be OPEN when the Alarm Filter is Switched OFF remotely)

Connections for Remote Alarm Filter Control

Drawing: ALM-REMOTE
 Date: 07/03/07
 Tel: 0208 795 0333
 Fax: 0208 795 0444
Windcrest

Programming Modes

(Plug-in the programmer, power down the unit totally, power up again & press ENTER on programmer to enter programming mode.)

The Programmer will show "1. Prog/5. Check".

To program the unit Press 1. To check the content of the unit, press 5.

If 5 is selected, press Enter button to see the next parameter. Cancel can be pressed to go back to the previous parameter.

Basic Programming (Non EN81-28)

Key in No for CB HOT Line Mode (If CB Hotline is selected, it will not ask for any telephone numbers)

Note:- If internal telephone network is used, to access the outside line, [9] may require prior to dialling the telephone number. Key in a [9] before the telephone number(s) if required.

Key in 1st Telephone Number then press [Enter]

Key in 2nd Telephone Number then press [Enter]

Key in 3rd Telephone Number then press [Enter]

Key in 4th Telephone Number then press [Enter]

Key in [NO] to "EN 81-28 TestCall"

Key in 5th Telephone Number then press [Enter]

Key in [NO] to " Set SP Bit 1"

Key in [NO] to " Set SP Bit 3"

Key in [NO] to " Set SP Bit 5"

Key in [ENTER] for "Windcrest ID" Number

Key in [1][2][3][4] for "Set RPA Number" as Default then [ENTER]

Key in [2] for "Set CallDuration" ie 2 minutes. (Call duration Can be set from 1 to 9 Minutes)

Key in [NO] for "Pulse Dialling: " to select Tone Dialling

Key in [NO] for "Instant Trigger:" for 3 sec. trigger delay

Key in [NO] for "Alarm Push N/C:" for normally open alarm push.

Note: If [Yes] then Lift Car Alarm Push will be considered as Normally Closed.

Key in [NO] for "AutoJump Next:"

Key in [1] for an User Recorded Message as the Lift Identification Message or [2] for pre-recorded numerical Contract Number as the Lift Identification Message. (Follow the instructions on the programmer to Record the message or Key In the Contract Number & Lift Number).

Key in [NO] for "Voice Identify:" ie no voice Identification set.

Key in [YES] for "Have you Finished?" to exit programming mode. To Check the programming parameters Press "5" and scroll through the parameters by pressing Enter (*).

- **CB HOTLINE :** In CB HotLine mode, Autodialler will pick up the telephone line and will not dial any number, as this option is selected when lines are such, that they dial number by themselves.

Programming for EN81-28

Note:- If internal telephone network is used, to access the outside line, [9] may require prior to dialling the telephone number. Key in a [9] before the telephone number(s) if required.

Key in 1st Telephone Number then press [Enter]

Key in 2nd Telephone Number then press [Enter]

Key in 3rd Telephone Number then press [Enter]

Key in 4th Telephone Number then press [Enter]

Key in [YES] to “EN 81-28 TestCall”

- * Key in [0] for Test Calls with Windcrest Central Station Computer. The software should be installed and ready to accept calls from autodiallers to log events. Key in [1] for manned station (no PC/Software required).

Key in 70 Hours as default for “Test Call Hours?” frequency. (For EN 81-28 Requirements Test Hours frequency should not be greater than 72 hours)

Key in dedicated Test Tel Number then press [Enter]

Key in [NO] to “ Set SP Bit 1”

Key in [YES] to “ Set SP Bit 3”

Key in [NO] to “ Set SP Bit 5”

Key in [ENTER] for “Windcrest ID” Number

Key in [1][2][3][4] for “Set RPA Number” as Default then [ENTER]

Key in [2] for “Set CallDuration” ie 2 minutes. (Call duration Can be set from 1 to 9 Minutes)

Key in [NO] for “Pulse Dialling: ” to select Tone Dialling

Key in [NO] for “Instant Trigger:” for 3 sec. trigger delay

Key in [NO] for “Alarm Push N/C:” for normally open alarm push.

Note: If [Yes] then Lift Car Alarm Push will be considered as Normally Closed.

Key in [YES] for “AutoJump Next:”

Key in [1] for an User Recorded Message as the Lift Identification Message or [2] for pre-recorded numerical Contract Number as the Lift

Identification Message. (Follow the instructions on the programmer to Record the message or Key In the Contract Number & Lift Number).

Note: Connect the speaker box for the lift car directly into the Windcrest Autodialler. ie into the BT Type socket on the side of the inner box. Do not connect the flying lead of the Windcrest unit into the Telephone line.
(*Example of User Recording Message “**Alarm has been activated from lift 2 at St Peters Street, London NW2, please press Star after the tone**”.*)

Key in [YES] for “Voice Identify:” ie no voice Identification set.

Key in [YES] for “Have you Finished?” to exit programming mode. To Check the programming parameters Press “5” and scroll through the parameters by pressing Enter (*).

Remote Programming of the AD1000EN-R range of Autodiallers

The autodialler has the facility to auto-answer an incoming call, after 6-15 seconds. Once the call has been answered, the programming mode can be instigated by a series of simple commands via a simple Touch-Tone Telephone or a Mobile Phone.

The programming is by means of using the (DTMF) Touch-Tones from the calling telephone or a management computer based system into the Lift car.

To enter into the Remote Programming Mode, a Remote Programming Access (RPA) Number, must be entered in the following format “*v..vv#” within a time period of 30 seconds. (v is any digit 0 to 9). The Default is 1234.

If the RPA is incorrect the system will go in the normal auto-answer.

If the RPA number is correct, the system will output two short Beep tones and wait for additional command tones for a period of 30 seconds before exiting and going in the normal auto-answer mode, i.e. line being connected to the speaker box, after the emission of a short tone.

Exiting from the programming mode is by either a command code sequence, or no activity for 30seconds whilst in the programming mode. (Note, when entering the remote programming mode, the call duration time period is suspended; and re-established when existing from the programming mode).

The following can be implemented once in the programming mode.

| | |
|------|--|
| *00# | Terminate Programming Mode |
| *vv* | Announce the Programmed number e.g. if *15* is entered; the system will produce “Beep 15 Beep 5627899 Beep” if the Phone number of the 5th number was 5627899. |

Sequence of Events

1. Call the Lift using a simple phone. The call may be answered by a person in the Lift car or will be Auto-answered and you will be connected to the Speaker in the Lift car.
2. Inform the person in the Lift car that you are about to update the Emergency Telephone.
3. Key in the Remote Programming Access Number, Default being 1234
So key on your telephone *1234# The unit will respond by two beeps.
4. Change the first number *11#v..v# where v is any digit from 0 to 9.
5. Change the 2nd Number *12#v..v#
6. Change the 3rd Number *13#v..v# and so on till the 5th phone number

If a second # is added at the end of a programming string, e.g. *14#02087950333## the remote unit will confirm your entered number by announcing “Beep 14 Beep 02087950333 Beep” over the telephone line so a desk top telephone is advantageous.

7. To active Alarm Filter *46#1#. By Default Alarm Filter will be ON only.
8. To turn off Alarm Filter *46#0#. When Alarm Filter is switched off, Both Pictograms in Lift Car will be permanently ON to indicate Alarm Filter is OFF. Refer to the Remote Alarm Filter Control Connections.
9. Enter *00# to end remote programming.

Note:- Full Remote Programming Instruction is available on the website. Download “Remote Programming Instruction for Version P3” from www.windcrest.co.uk.

Special Bits Settings: “SP Bit ?”

“SP Bit1?”

Set [N0] as Default. if set to a [YES] will automatically turn ON green Pictogram after completion of dialling. If Voice Identify or Autojump is enabled, this bit will be overlooked.

“SP Bit 3?” (Set YES for EN81-28 *).

Set [N0] as Default.

If set to YES, after the alarm call the Yellow Pictogram will remain ON until the Alarm State is cleared by the competent person. To Clear the Alarm State, short across “Ms” & “+” for 3 seconds and within 30 minutes, trigger the Autodialler by pressing the Alarm Button in the Lift Car. During the Alarm Call, request the call centre recipient to press “7” followed by “0”, upon receiving the tones, the call will be ended and both the pictograms will be switched off. After Every Alarm Call made, this procedure will have to be followed according to EN 81-28.

In addition to above, if the automatic test call fails, and if the unit is not in the Alarm State, the Yellow and Green Pictograms will flash in opposite direction every second.

“SP Bit 5?”

Set [N0] as Default. If [YES] all incoming DTMF tones are NOT detected.

ALARM Filtering

An ALARM Filter is required if the equipment is to comply with the requirements of BS EN81-28. The Input signals required are:

- Zone Signal (ie Signal when the Lift is in Door zone).
- Door Open Limit (ie Signal High when the lift doors are fully open).
- Engineer Signal (ie a lift in Test Mode signal or an Eng.ON Site).
- Gate Lock (ie Signal when the landing door is open)

CB/Hot Line Mode

This is a special mode. When Alarm is activated the unit first announces “Emergency Telephone is activated, To terminate the call press the alarm button again” and goes online. After successful conversation the user needs to press the alarm button to disconnect the call.

Testing of the Installation

Each speaker box needs to be tested by activating the associated alarm push button. The system will trigger provided the lift is in a fault condition or has been switched for Engineer on site/Lift Switched for Test.

Once triggered, the Yellow Pictogram will illuminate, and the unit will call for assistance. A speech prompt will assist in the operation of the equipment. After the rescue service responds and acknowledges the call, by pressing a star (*) on his telephone, the Green Pictogram will illuminate. If an announcement is in progress the helper should wait until the announcement is over before pressing a button on the telephone (e.g. [*]).

The call can be terminated by pressing a zero (0) on the telephone by the rescue service operator. However, the autodialler will terminate the call automatically after the programmed call duration period if a zero (0) was not received. (The call may be extended by the pressing of Alarm Push when requested to do so by voice message prior to call termination).

On completion of the call, the system will indicate an alarm state, has been activated by the flashing of the Yellow Pictogram.

The rescue service needs to be informed of the test call and request then to call you back after terminating this call. At which point the alarm state can be reset by the rescue service whereupon the Yellow Pictogram will stop flashing.

The Windcrest system has an ability to carry out an automated test every 3 days. This must be implemented if the product is to comply with BS EN81-28 and BS EN81-70. Further it is important that a manual test be carried out as defined above on a regular basis.

Maintenance & Warranty

The Windcrest system has been manufactured under BSI Quality system and requires very little maintenance. However, the Windcrest system will need the main battery test/change every three years. The internal Battery Backed RAM should be tested every 8 to 10 years by confirming the data is retained after a power down of the main backup battery for 5 minutes. At the time of battery test, the DTMF tones should also be tested/calibrated.

Special Information to be kept with the equipment for the Owner/Managing Agent for the BS EN81-28 Implementation.

1. The lift's communication system must be connected to a rescue service and be kept working to provide a 2-way voice link.
2. The rescue service must be informed of the installation of the Autodialler (The ID of the unit together with the telephone number of the phone line on which the unit is connected must be noted. Further, if more than a single unit is placed on the phone line, a note of the lift number must also be provided).
3. The communication system must be regularly tested, manually and automatically, to ensure the system is working. If it fails to work, the lift must be placed out of service.
4. Information in the Operating, Maintenance and Testing of the Autodialler must be kept. (A copy of the installation manual will contain all the necessary information).
5. Information on programming, with a Hand-held programmer, or with a simple Touch Tone telephone, is included in the installation manual.

Answering an incoming call

From a Trapped Passenger or Non computer based Auto-Test

Trapped Passenger

Answer the phone as usual.

The phone will be connected to the lift, at which point you will hear a speech prompt which will identify the lift's location, provided the system has been set appropriately.

Press the star (*) button on the telephone to acknowledge the call, (for EN81-28 the Green pictogram will activate in the lift car) and conduct the conversation with the trapped passenger.

Once the conversation has finished, terminate the call with a zero (0) and thereafter placing the handset down.

Non Computer based Auto-Test

If during the programming SP Bit-4 is Set to Yes for the Manned central station Auto-Test Calls, Autodialler will make call every 1/2/3 days and after answering the call, it will announce "EN 81 Test Call Press 0 Now". After the message, press 0. Unit will announce the recorded location message and terminate the call. If 0 will not be pressed, unit will repeat the message every 5 seconds.

Vandal/nuisance calls

If a Vandal has made a call from a lift location, it is possible to disable the ALARM button for 30 minutes by pressing a nine (9) during the call.

From an Engineer after releasing passenger(s)

Answer the phone as usual.

The phone will be connected to the lift, at which point you will hear a speech prompt which will identify the lift's location, provided the system has been set appropriately.

Press the star (*) button on the telephone to acknowledge the call, and conduct the conversation with the Lift Engineer.

Once the conversation has finished, Cancel the Alarm State by pressing a "7" (i.e. Yellow Pictogram) and then terminate the call with a zero (0) and thereafter placing the handset down. If the Alarm State is not cleared for 10 minutes, the Pictogram Flashing will reset automatically.

Calling a Lift

NB: It may not be possible to call a lift if connected to an extension of a PABX

Call the Lift's phone number as usual.

When the call is answered, a tone and a speech prompt "Answering an incoming call" will confirm connection to the lift car.

Pressing "7" on the handset during the conversation, Autodialler will announce the location message stored by the engineer at the time of the installation.

Once the conversation has finished, terminate the call with a zero (0) and thereafter placing the handset down.

(The call may be extended by the pressing of Alarm Push when requested to do so by voice message prior to call termination).

Under normal circumstances, the lift, which has made an outgoing call, will be the lift, which will answer the call first. However, if an incorrect lift has responded, simply terminate the call and ring in again.

To inform the rescue service that passengers have been released a separate switch (key switch) can be installed in the lift car which when operated will call the rescue service in a different way to that of a normal call when the alarm push is pressed.

Note: Autodiallers with ID x x x x 02 77 will need LiftAlert 2000 version 2.0 software for central monitoring station.

Special Information for the Rescue service in relation to the Installation of an Autodialler on a lift to comply with BS EN81-28:2003.

A Windcrest system has been installed at the following location, the telephone system must be capable of providing DTMF tones. However, if this is not possible, Windcrest may be in a position to provide special equipment. The information below will provide the ability to:-

- Establish at all times a 2-way communication with the trapped passenger and to allow updating as to the status of the rescue.
- Ability to locate the lift and method to gain access to the trapped passenger.
- The notification of the back-up power supply reaching a level so that only 1 hour of operation is possible.

Contract Number

| |
|--|
| |
|--|

Address of the Lifts location

| |
|--|
| |
|--|

Special procedures to gain access to lift i.e. Key-holders, hazards, etc..

| |
|--|
| |
|--|

Lift number

Windcrest ID Number

| | |
|--|--|
| | |
|--|--|

Lift's Telephone Number

Number of Windcrest units on the phone line

| | |
|--|--|
| | |
|--|--|

Filtering Installed

Automatic Test set up

Manual test

| | | |
|--|------------|--|
| | For 3 days | |
|--|------------|--|