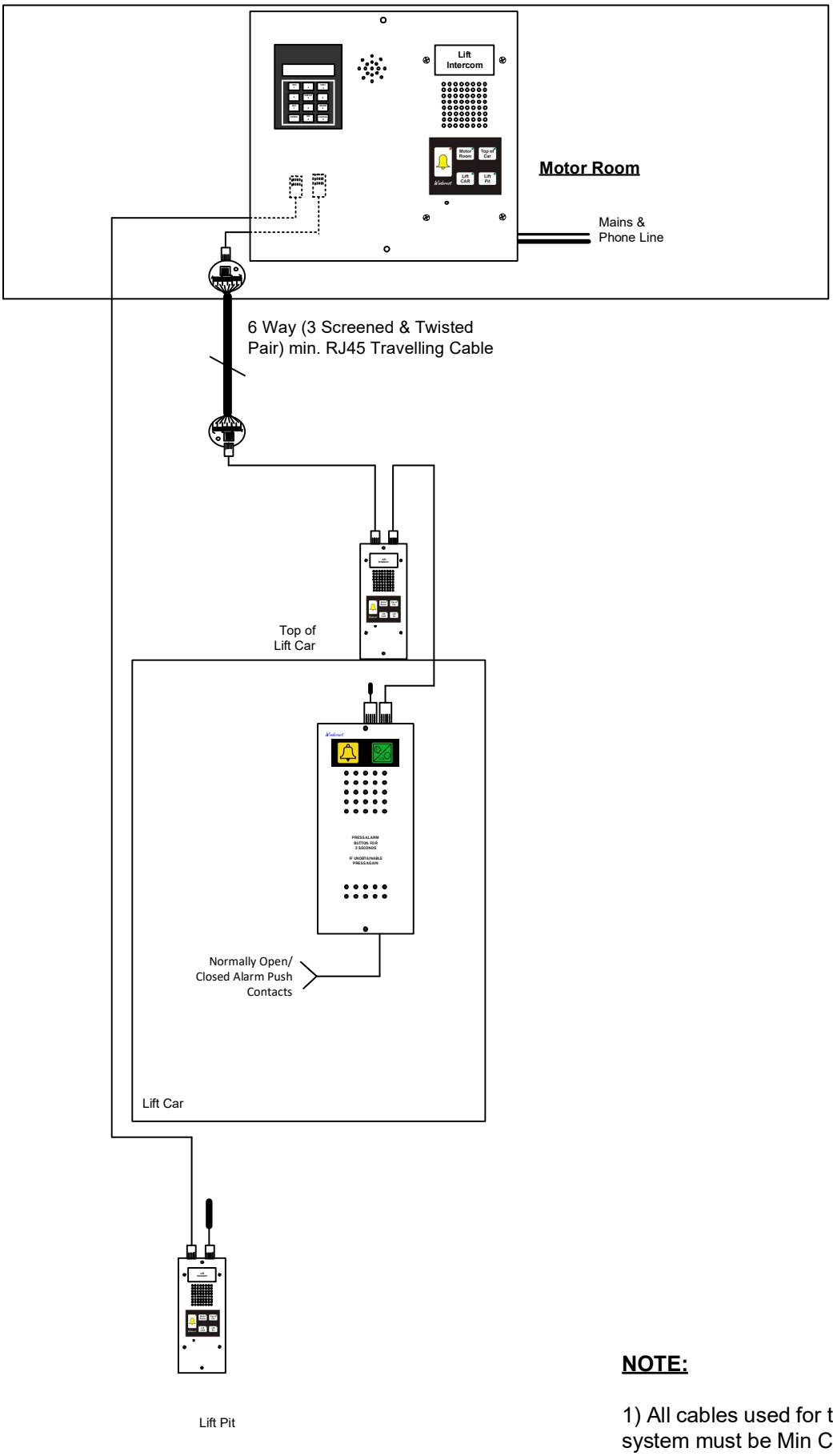
# AVCOM EN-4RD STD System Installation Instructions

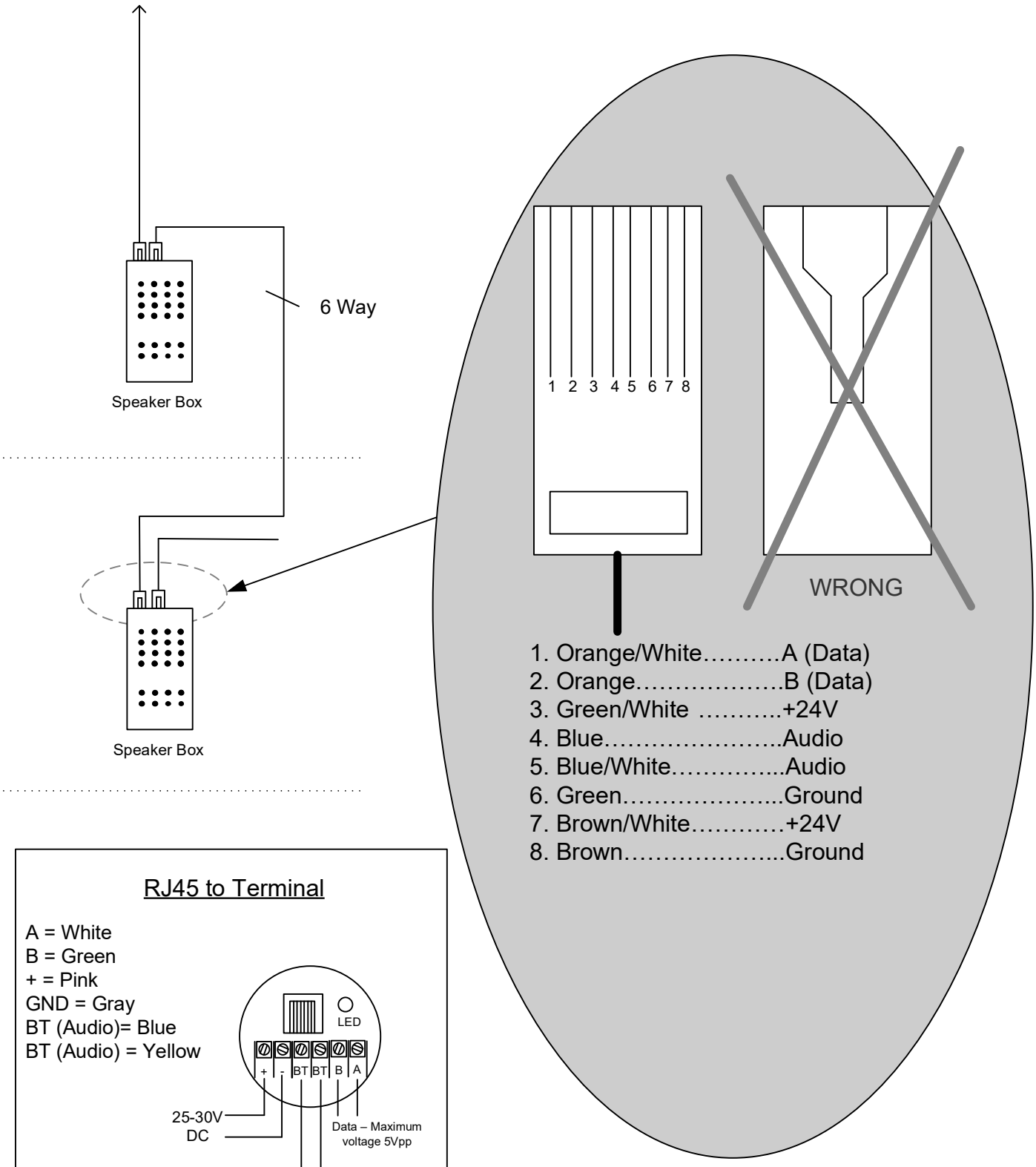
| Cable description | Multi core wire | CAT5 | or Cable used in special cases only |
|---|---|---|---|




**NOTE:**

1) All cables used for the system must be Min CAT5

| AVCOM EN-4 with Pit Speaker Arrangement | Drawing : EN4-Pit | Page : 1 |
|---|---|---|
| | 01/08/2011 | Version: 2 |




## RJ45 to Terminal

A = White
B = Green
+ = Pink
GND = Gray
BT (Audio)= Blue
BT (Audio) = Yellow




For Troubleshooting, connect the RJ45 to Terminal to the Cable and check the above readings. If the readings are different than above, please contact Windcrest.

**RJ45 Plug & RJ45 Plug to Terminal**

**Drawing: RJ45 Plug** **Page: 2**

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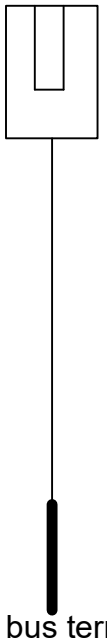

Connect bus terminator to the last outstation on each bus.

**Note: The Terminator must be installed. If the terminator is not installed, it will result in un-reliable operation of the system due to data corruption.**

| | | |
|---|---|---|
| **RJ 45 Bus Terminator & Speaker Box** | **Drawing: Terminator** | **Page: 3** |
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# AVCOM Functions

## Configuration

The AVCOM system can be configured to be EN1/EN3/EN4 System.

## Interconnection

All the speaker box assemblies will be connected directly or indirectly via a 6 wire bus (however a CAT5 cable with RJ45 Connectors will be used of installation) to the Control/Power supply unit. This interconnecting wire bus will have a 2 pairs of wires for the Power supply, a pair for the Audio and a pair for the Data.

## Operation

### Autodialler

The Autodialler will function at all times when the Fire Fighting Switch has not been operated.
Ie If the Car push button is operated, for 3 seconds and the alarm filter allows the signal to trigger the Windcrest autodialler, the Yellow Pictogram will operate and a Speech Synthesis message will be announced in the lift car. This message will instruct and reassure the passenger that a call for assistance is being made.
The autodialler will attempt calling the 1st pre-programmed number. If the person who answers the call, presses * button on the telephone handset, Green Pictogram will operate in the Lift Car. During the conversation a speech synthesis reminder will occur to inform the need to press the Alarm Button in the Lift Car to continue the call. If he fails to do so, the call will terminate. If however the call is to be terminated prior to the automated termination, a “0” on the called persons telephone will terminate the call.

The calling out by the Engineer from the Top of car, Motor Room and the Lift Pit will be the same, except the pictogram operation. Lift Car Alarm Push will have priority over all other Alarm Calls. i.e. If Alarm is Activated from top of car and during the call, if Alarm Push button is detected from the Lift Car, it will disable the Top Of Car call and activate Alarm call from Lift Car.

### Intercom

If unit is programmed for EN4 functions, at any time when the system is idle, i.e no alarm activation/Fire Fighting OFF, intercom facility will be available within Motor Room, Lift Car, Lift Pit, Lift Top Of car. Intercom can be operated by pressing the corresponding button on the KeyPad. Pressing the same button will switch off the intercom. When Intercom will be open corresponding LEDs will be ON, on the keypad on all outstations to indicate Intercom is ON.

Note : Anytime, if Alarm button is pressed intercom will be switched off and AVCOM system will perform normal Autodialler function from the outstation.



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**Background Operation**

The system will make the automated 3 day test calls to a Central Station in accordance to EN81-28.

**Troubleshooting**

If LEDs on the Keypad of the outstation speakers, both pictograms in the Lift Car starts flashing continuously, it indicates data failure to that point. i.e. If Lift car speaker's both pictogram flash continuously, it indicates data link failure to Lift car speaker.

If Pictograms at the Main Fire Fighting Landing and the MRL-FF Landing/Top Landing Speaker for Fire Fighting start flashing continuously, it indicates data link is failed at those outstations. This can occur due to data cable failure or incorrect programming. i.e. if system is NOT programmed for Fire Fighting, FF Main Landing and Top Landing Speaker will not receive the Data.

On the Top of Car, MRL/Motor Room, Pit Speaker, there is a keypad representing all the buttons for Top of Car, Car, Pit and MRL/Motor Room. In the idle mode, those all LEDs will be lighting up in the loop to indicate system is live and Data Link is available to the speaker. If any of the button's LED does not light up in the sequence, it indicates that Outstation Speaker is not programmed in the system or that Outstation Speaker is not present in the system, which may be due to data failure to the outstation, Outstation Speaker not connected to the system or Outstation Speaker itself may have gone faulty.

Note: During the programming of the unit via Keypad, Unit will not scan any outstations. i.e. no data link, which will result in the flashing of the all the LEDs at all outstation speakers.



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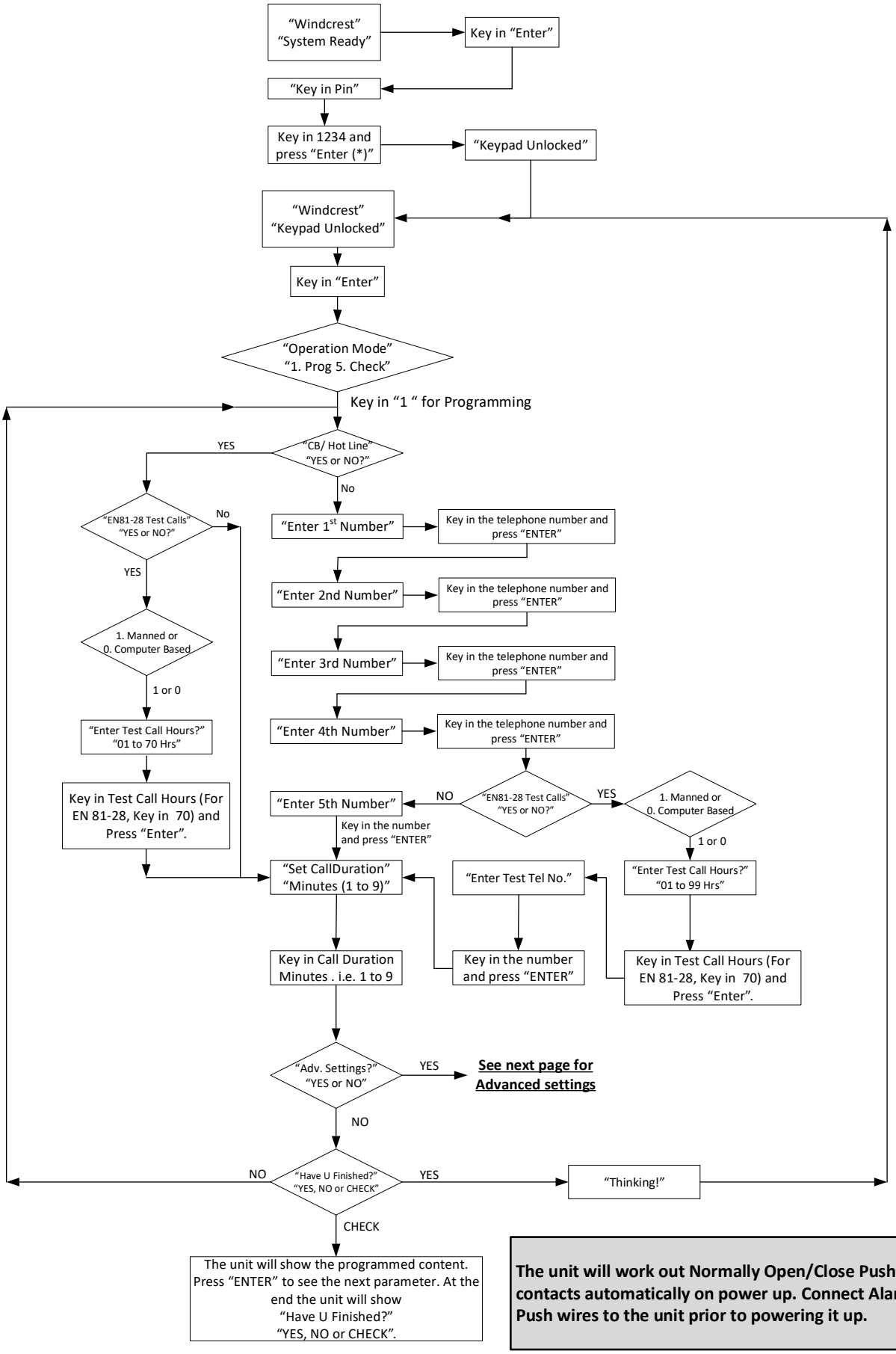


**The unit will work out Normally Open/Close Push contacts automatically on power up. Connect Alarm Push wires to the unit prior to powering it up.**

## Basic Programming of the System

Drawing: 2WAVCOM_BASIC_PROG
Date: 03/11/19



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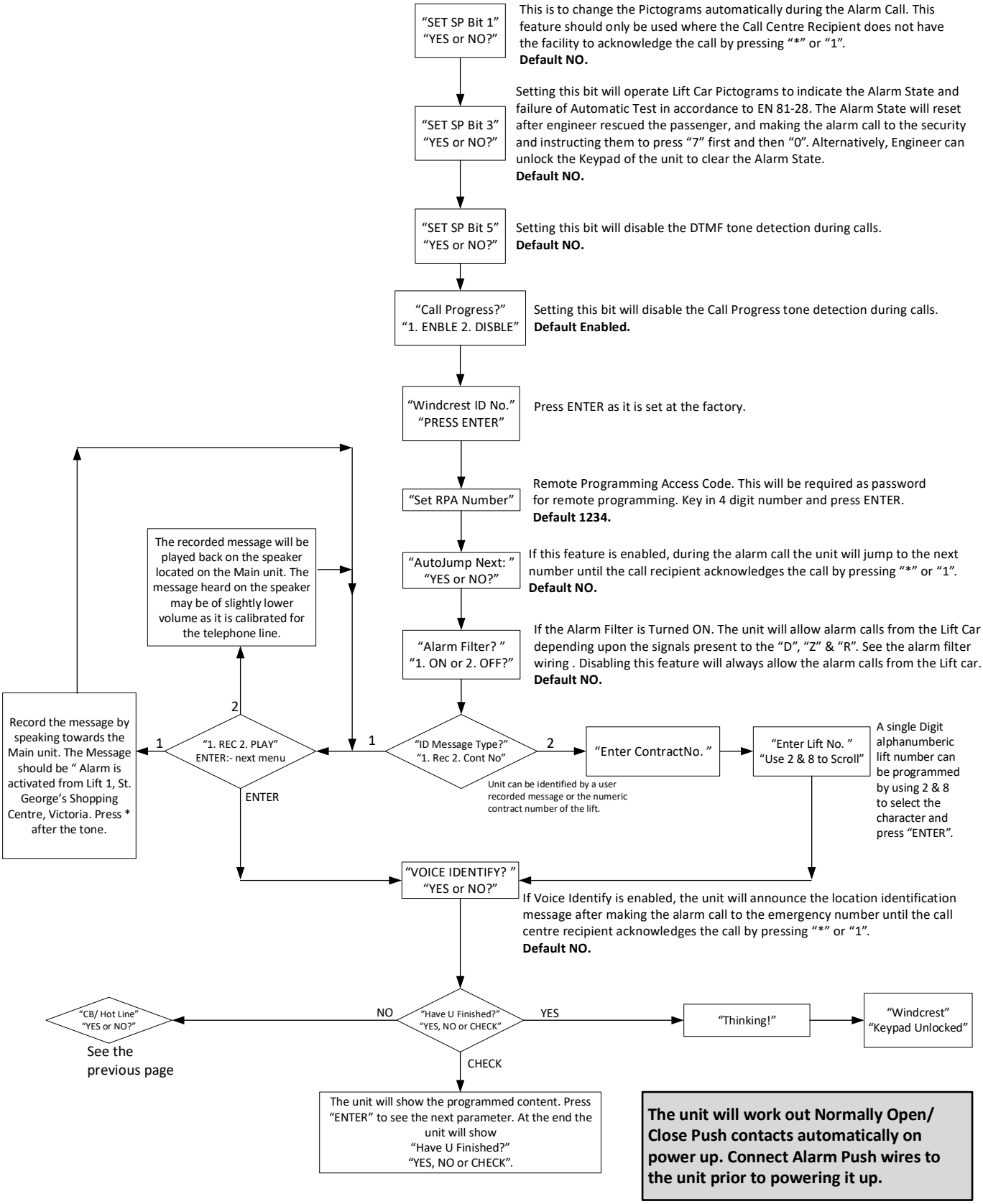


## Advanced Programming of the System

Drawing: 2WAVCOM_ADV_PROG
Date: 03/11/19



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## Remote Programming

The system can be remotely programmed by calling the telephone number where the unit is connected. Follow the steps below:-

1) Call the telephone number of the unit.
2) Once the unit answers the call, wait for 5 seconds after the unit completes all the automated announcements.
3) Key in *RPA NO# on the telephone handset. For example the default RPA no. is 1234. therefore key in *1234#. If the RPA is accepted, the unit will respond with two beeps. If the RPA identified by the unit is incorrect, the unit will give several beeps for warning.

Once the RPA is accepted by the unit, key in the strings on the telephone handset to program the corresponding parameter. At the end of each string, the unit will announce the complete string to confirm the programmed parameter in the format “Beep”- “Parameter Digits”-“Beep” -“Value”-“Beep”.

### Programming strings:-

| | | |
|---|---|---|
| 1st Telephone Number | *11#Number## | |
| 2nd Telephone Number | *12#Number## | |
| 3rd Telephone Number | *13#Number## | |
| 4th Telephone Number | *14#Number## | |
| 5th Telephone Number | *15#Number## | |
| Contract Number | *16#Number## | |
| Windcrest ID Code | *17# | Unit will announce the programmed ID Code |
| Test Calls | *20#N## | N = 0 to Turn OFF<br>N = 1 to Turn ON. |
| Auto Jump | *21#N## | N = 0 to Turn OFF<br>N = 1 to Turn ON |
| SP BIT 1 | *22#N## | N = 0 to Turn OFF<br>N = 1 to Turn ON |
| HOT LINE<br>(Automatic dialling by telephone line) | *23#N## | N = 0 to Turn OFF<br>N = 1 to Turn ON |
| Voice ID | *24#N## | N = 0 to Turn OFF<br>N = 1 to Turn ON. |
| Voice ID | *25#N## | N = 0 for 3 seconds Trigger Delay<br>N = 1 for Instant Trigger |
| Identification Message | *26#N## | N = 0 for Contract Number<br>N = 1 for User Recorded Msg. |
| SP BIT 3 | *27#N## | N = 0 to Turn OFF<br>N = 1 to Turn ON |
| Test Call Type | *28#N## | N = 0 for Computer Based Test calls<br>N = 1 for Manned Test Calls |
| Test Call Type | *29#N## | N = 0 for Call Progress Tone Disabled<br>N = 1 for Call Progress Tone Enabled |
| Call Duration | *30#N## | N = 1 to 9 |
| Test Call Frequency (Hrs) | *40#NN## | NN = 01 to 99 Hours |
| Lift Number | *41#NN## | NN = 00 , 01 , 02 , 03 ,04 ,05 , 06, 07, 08, 09,<br>For Alphabets<br>A=10, B = 11, ….Z=35 |
| Alarm Filter | *46#N## | N = 0 to Disable<br>N = 1 to Enable |

To end the Programming *00#. Unit will give two beeps.
Following can be applied to check the programmed parameter.
*PARAMETER*. For Example. To find out the 1st programmed number Key in *11* and the unit will announce the 1st telephone number in the format BEEP-ONE ONE-BEEP-1st Programmed Number-BEEP.



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All AVCOM Speakers have unique address. This address is set by the Dip Switch on the back of the each speaker box. Following are the arrangements for the Dip Switch for the different speaker box.

Note: X – Do Not Care

| | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Car Speaker | ON | Off | Off | Off | Off | X |
| Top Of Car Speaker | Off | ON | Off | Off | Off | X |
| Pit Speaker | ON | ON | Off | Off | Off | X |
| MRL Speaker (For EN4 & FF) | Off | Off | ON | Off | Off | X |

| | |
|---|---|
| 2COP Speaker | This address is special and to be set at factory only. |
| FF Top Landing (EN3/EN1 StandAlone FF) | This address is special and to be set at factory only. |
| Fire Fighting Main Landing | This address is special and to be set at factory only. |

| Evacuation Landing Speaker | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Landing 1 | ON | Off | Off | Off | Off | X |
| Landing 2 | Off | ON | Off | Off | Off | X |
| Landing 3 | ON | ON | Off | Off | Off | X |
| Landing 4 | Off | Off | ON | Off | Off | X |
| Landing 5 | ON | Off | ON | Off | Off | X |
| Landing 6 | Off | ON | ON | Off | Off | X |
| Landing 7 | ON | ON | ON | Off | Off | X |
| Landing 8 | Off | Off | Off | ON | Off | X |
| Landing 9 | ON | Off | Off | ON | Off | X |
| Landing 10 | Off | ON | Off | ON | Off | X |
| Landing 11 | ON | ON | Off | ON | Off | X |
| Landing 12 | Off | Off | ON | ON | Off | X |
| Landing 13 | ON | Off | ON | ON | Off | X |
| Landing 14 | Off | ON | ON | ON | Off | X |
| Landing 15 | ON | ON | ON | ON | Off | X |
| Landing 16 | Off | Off | Off | Off | ON | X |
| Landing 17 | ON | Off | Off | Off | ON | X |
| Landing 18 | Off | ON | Off | Off | ON | X |
| Landing 19 | ON | ON | Off | Off | ON | X |
| Landing 20 | Off | Off | ON | Off | ON | X |
| Landing 21 | ON | Off | ON | Off | ON | X |
| Landing 22 | Off | ON | ON | Off | ON | X |
| Landing 23 | ON | ON | ON | Off | ON | X |
| Landing 24 | Off | Off | Off | ON | ON | X |
| Landing 25 | ON | Off | Off | ON | ON | X |
| Landing 26 | Off | ON | Off | ON | ON | X |
| Landing 27 | ON | ON | Off | ON | ON | X |
| Landing 28 | Off | Off | ON | ON | ON | X |
| Landing 29 | ON | Off | ON | ON | ON | X |
| Landing 30 | Off | ON | ON | ON | ON | X |
| Landing 31 | ON | ON | ON | ON | ON | X |



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