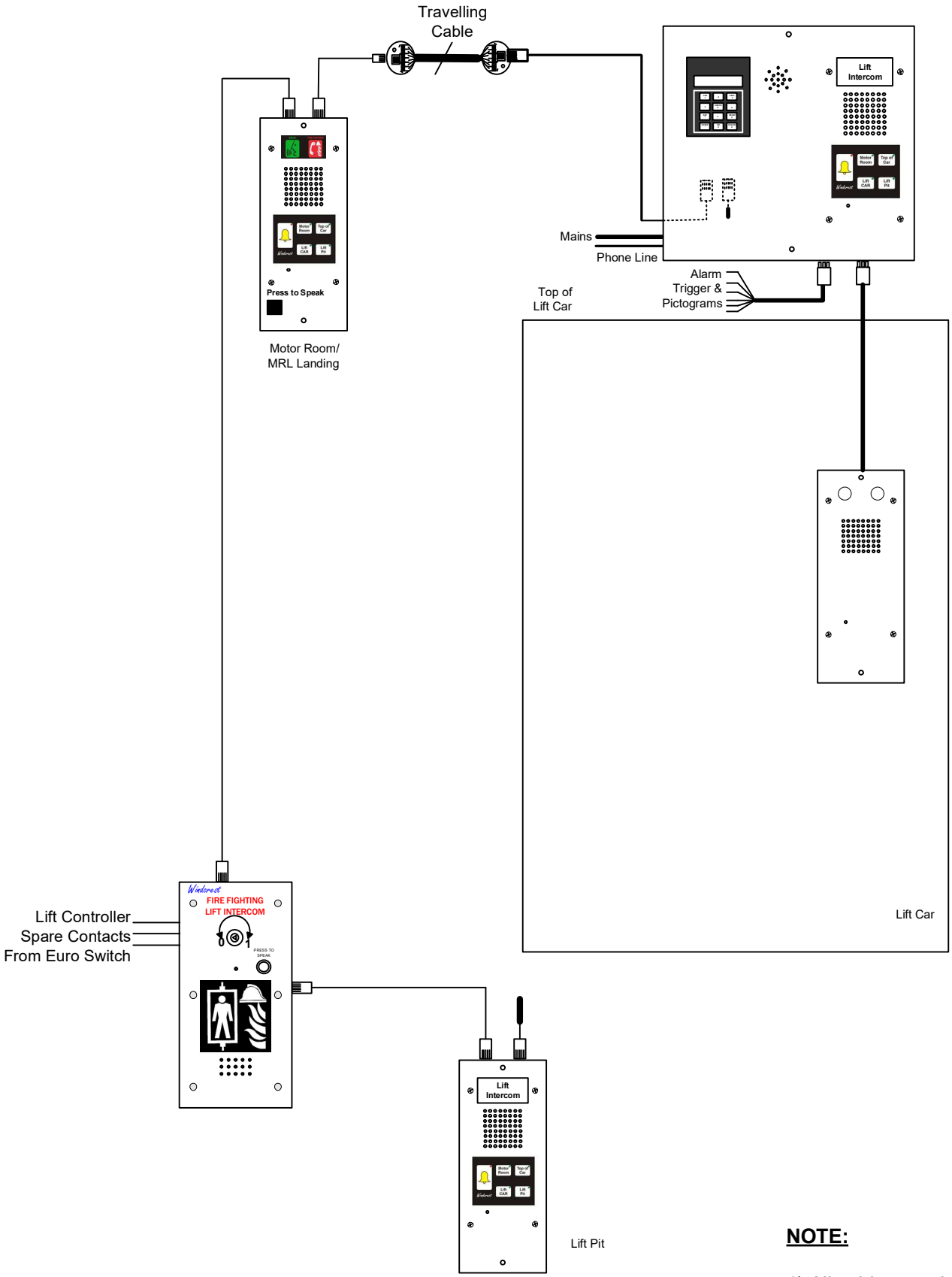
AVCOM EN-4RD SCH System With Fire Fighting Intercom Installation Instructions

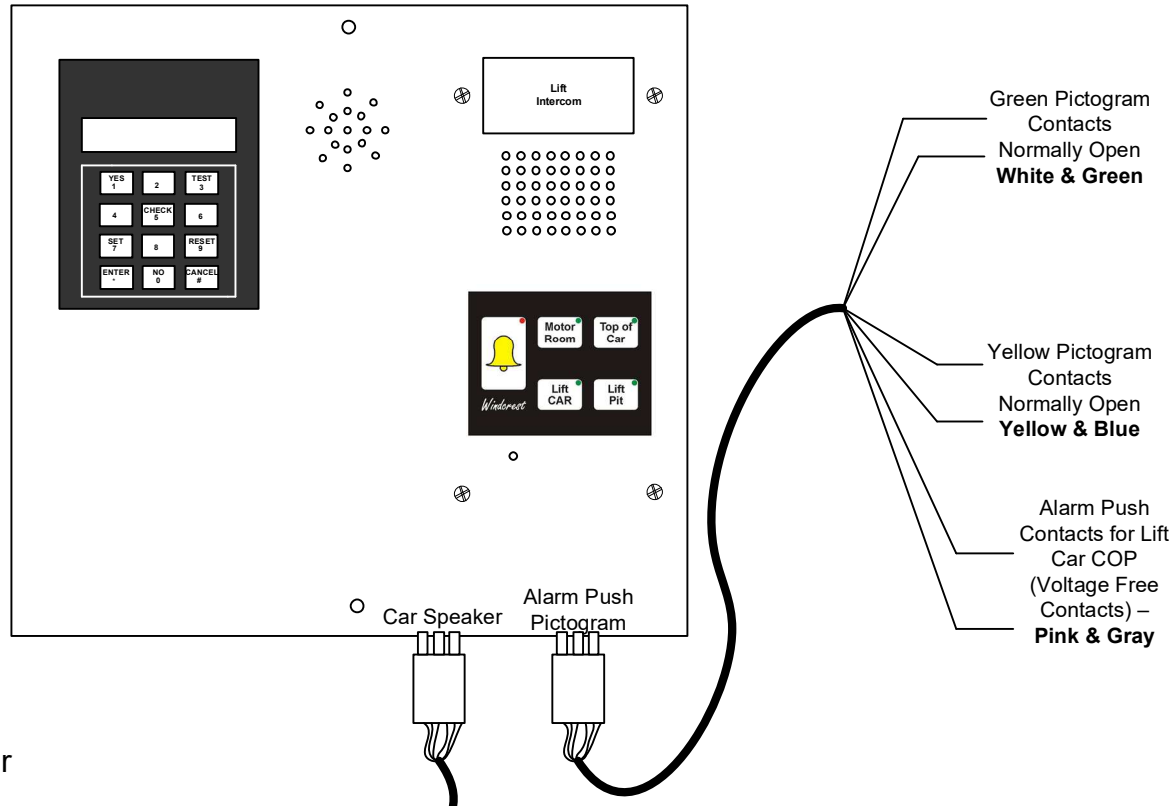
Cable description	Multi core wire	CAT5	or Cable used in special cases only



NOTE:

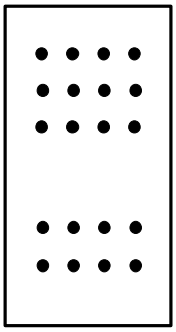
1) All cables used for the system must be Min CAT5

AVCOM EN-4 with Fire Fighting Intercom	Drawing : EN4-Pit FF	Page : 1
	01/08/2011	Version: 2



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.

Speaker box behind COP



Note: For best performance the Windcrest standard speaker box assembly should be used with Windcrest designed faceplate or same grill configuration on COP.

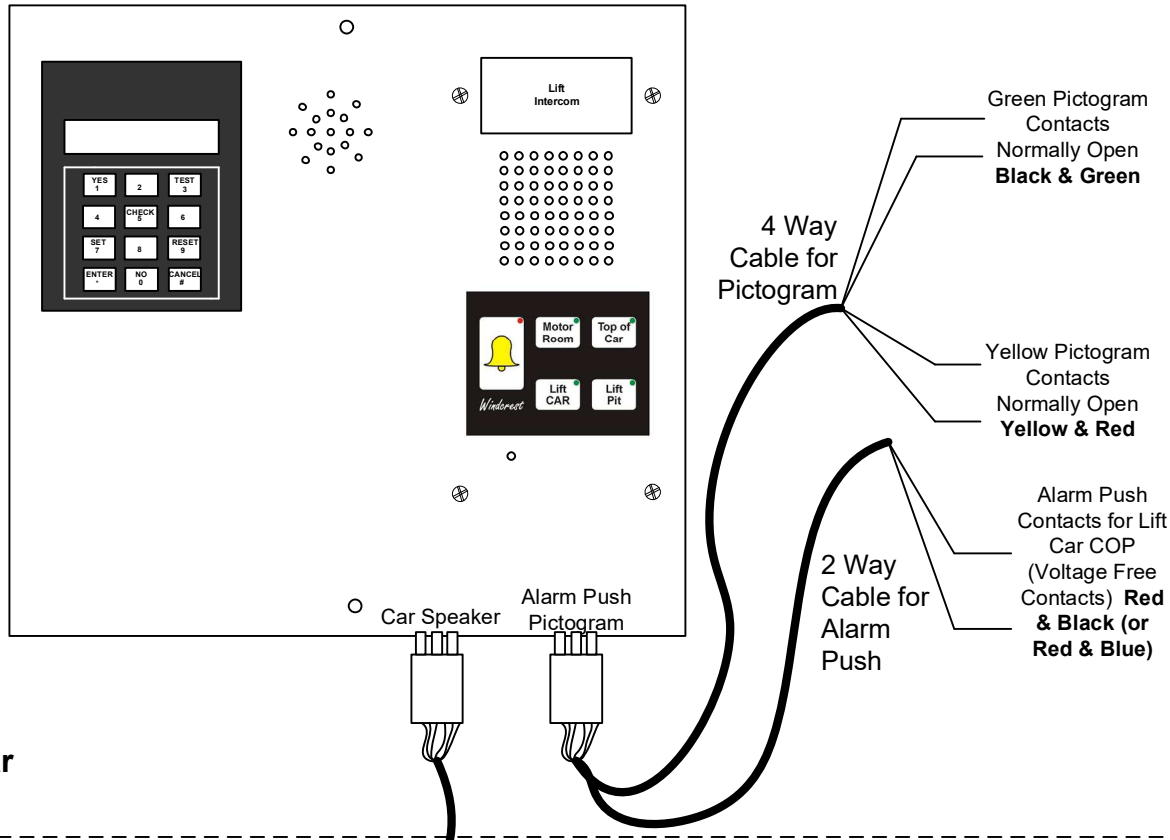
If the holes for the speaker are restricted without a back box and microphone not positioned to allow sound to enter it, the system will not perform correctly.

Lift Car

Car Speaker Wiring

Drawing : Car Speaker Wiring **Page : 2**

01/08/2011 **Version: 2**



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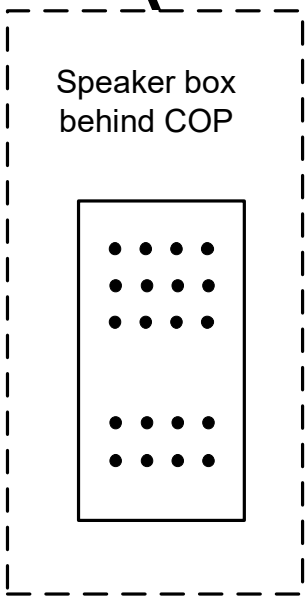


Note: For best performance the Windcrest standard speaker box assembly should be used with Windcrest designed faceplate or same grill configuration on COP.

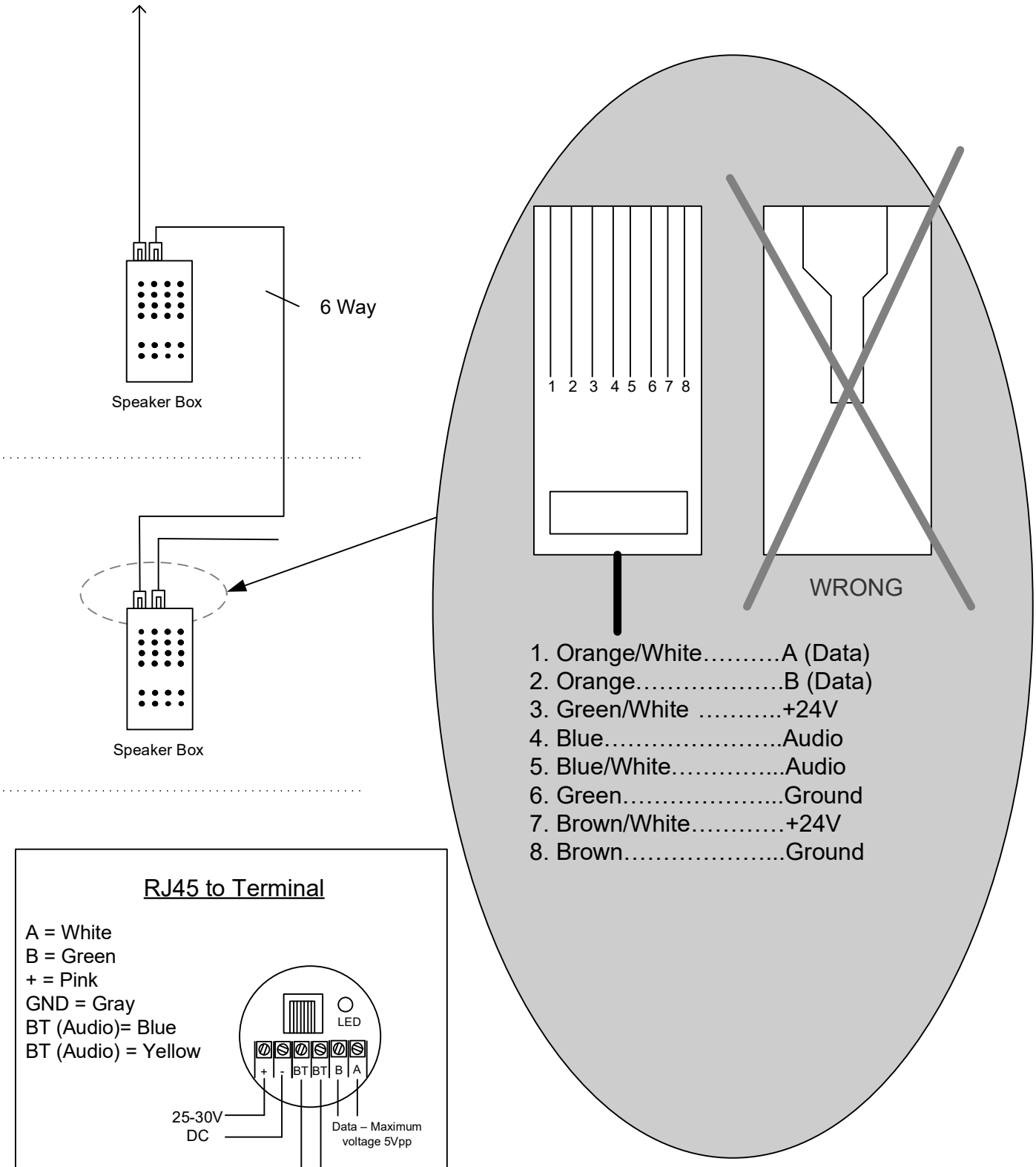
If the holes for the speaker are restricted without a back box and microphone not positioned to allow sound to enter it, the system will not perform correctly.

Lift Car

Car Speaker /Mic & Pictogram Wiring

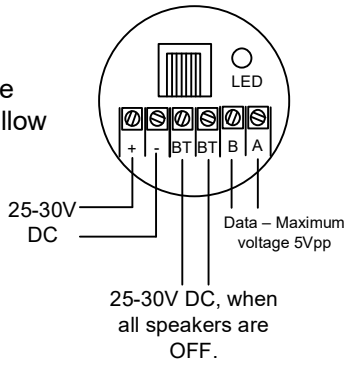
Drawing : Car Speaker Wiring **Page : 3**

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: 4**

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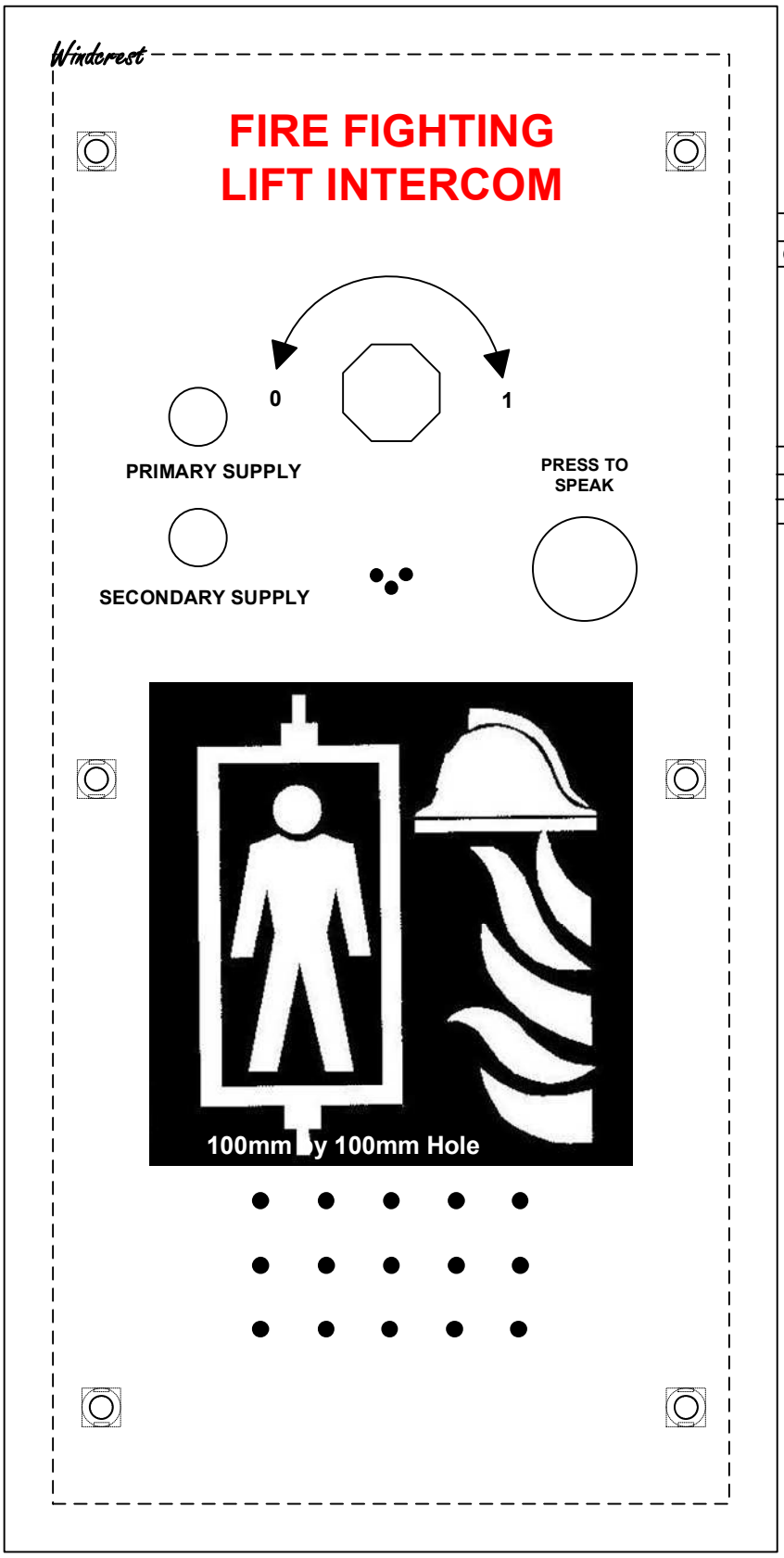
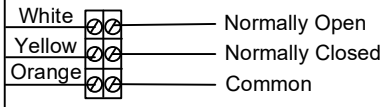
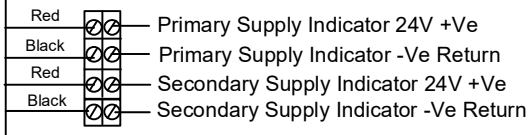


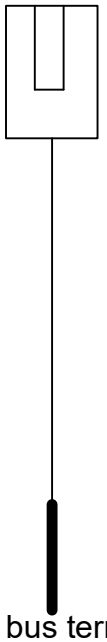


Lift Controller
Spare Contacts
From Euro Switch



Main Panel

Lift Controller Spare Contacts & Fire Fighting Switch	**Drawing : FF Contacts**	**Page : 5**
	01/08/2011	**Version: 2**



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: 6**
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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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AVCOM Fire Fighting Functions

Lift Controller Spare Contacts on the Fire Fighting Switch:-
Orange - Common
White- Normally Open
Yellow- Normally Closed

Interconnection

Connect Fire Fighting Main Landing Speaker to the bus. 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

When Fire Fighting Switch is turned on at the Fire Fighting Main Panel, 3 way communication will be turned ON among the Lift Car Speaker, MRL FF Landing Speaker/Top Landing Speaker and the Main Landing Speaker. There is press to speak push button at the MRL FF Landing Speaker/ Top Landing Speaker and the Main Landing Speaker. When the Fire Fighting Switch is Turned ON, Green Pictogram will illuminate in the Lift Car to Indicate communication link is ON. Pictograms at the MRL FF Landing Speaker/Top Landing Speaker and the Main Landing Speaker to indicate the status of the system.

When the Fire Fighting system is ON, no other operation will be allowed.

Turning OFF the Fire Fighting Switch will switch OFF the Communication and Pictograms.

Note:-

If the stripped down Speaker & Mic are used in the Lift Car, ensure the Microphone is securely placed to prevent water damage (For IPX3 Rating) .

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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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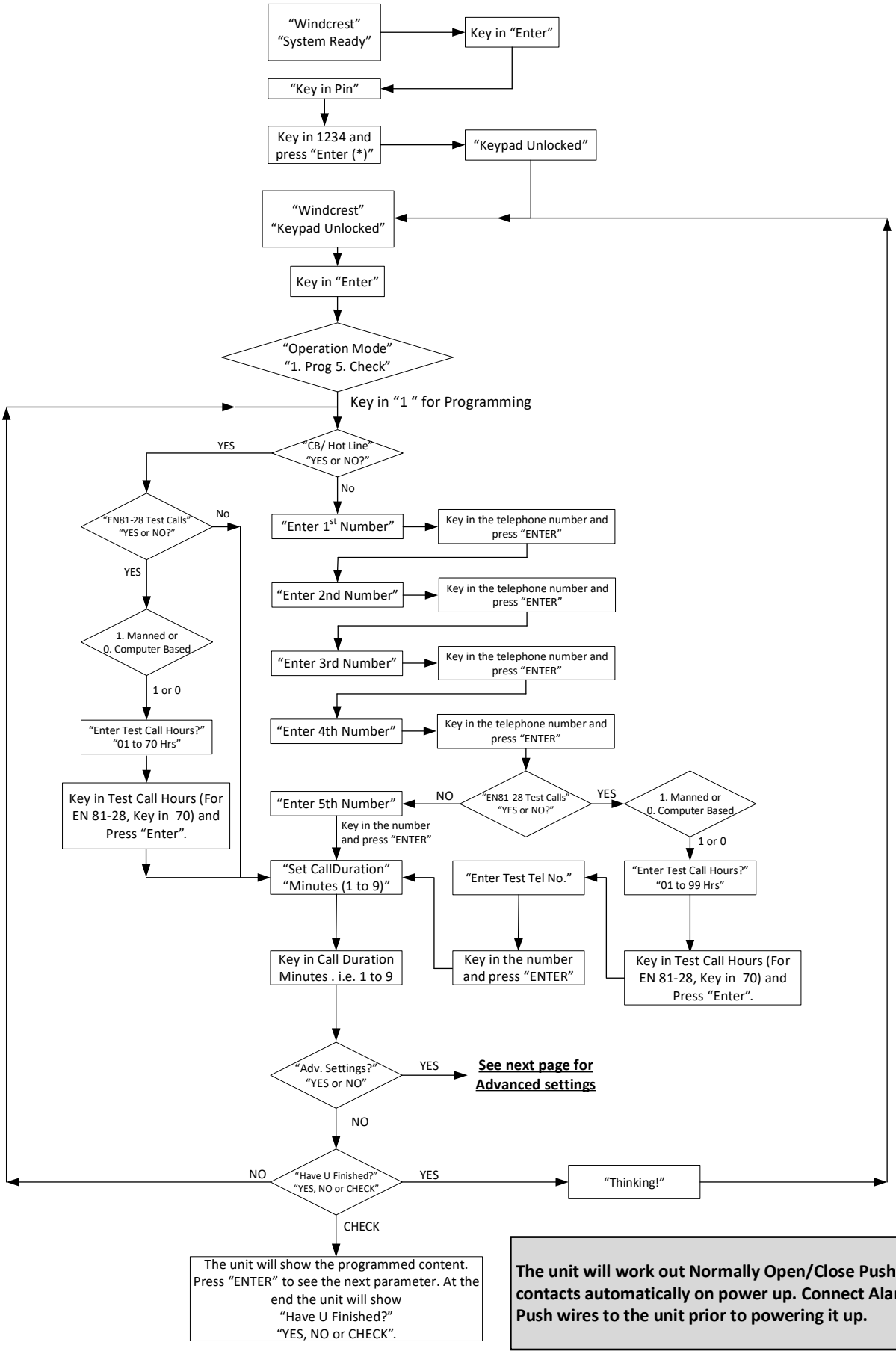

The unit will work out Normally Open/Close Push contacts automatically on power up. Connect Alarm Push wires to the unit prior to powering it up.

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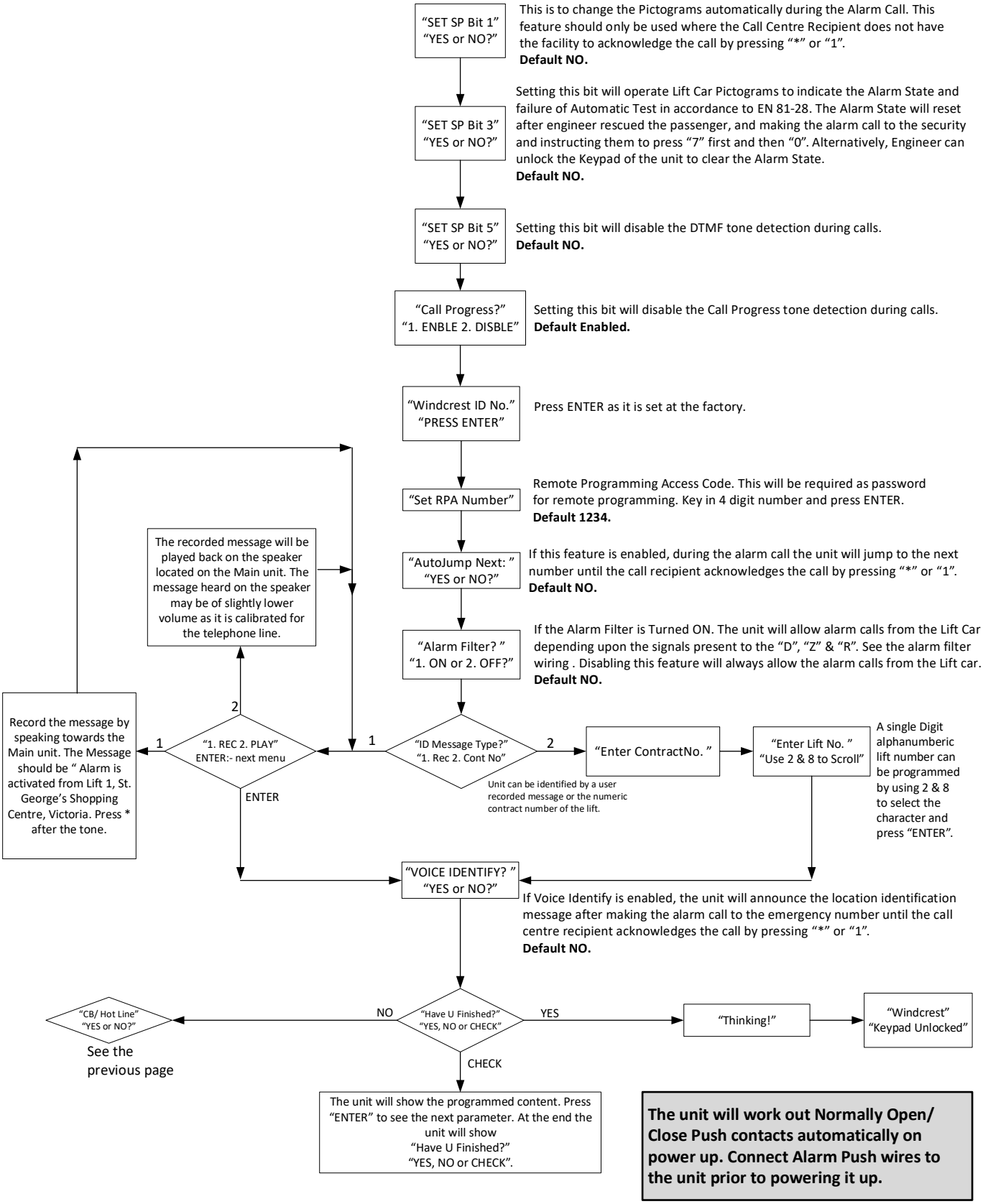

Advanced Programming of the System

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 N = 1 to Turn ON.
Auto Jump	*21#N##	N = 0 to Turn OFF N = 1 to Turn ON
SP BIT 1	*22#N##	N = 0 to Turn OFF N = 1 to Turn ON
HOT LINE (Automatic dialling by telephone line)	*23#N##	N = 0 to Turn OFF N = 1 to Turn ON
Voice ID	*24#N##	N = 0 to Turn OFF N = 1 to Turn ON.
Voice ID	*25#N##	N = 0 for 3 seconds Trigger Delay N = 1 for Instant Trigger
Identification Message	*26#N##	N = 0 for Contract Number N = 1 for User Recorded Msg.
SP BIT 3	*27#N##	N = 0 to Turn OFF N = 1 to Turn ON
Test Call Type	*28#N##	N = 0 for Computer Based Test calls N = 1 for Manned Test Calls
Test Call Type	*29#N##	N = 0 for Call Progress Tone Disabled 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, For Alphabets A=10, B = 11, ….Z=35
Alarm Filter	*46#N##	N = 0 to Disable 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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