Evacuation & Fire Fighting Intercom System

TYPE: SERIAL BUS

IMPORTANT: READ PRIOR TO INSTALLATION

- **Each Landing Speaker supplied should be installed on the designated landing as they are pre-assigned a unique address (Do not change the address as they are assigned from the factory. Contact Windcrest before changing address).**

- **The Master Switching Panel (with push buttons for each landing) should be installed on the main landing.**

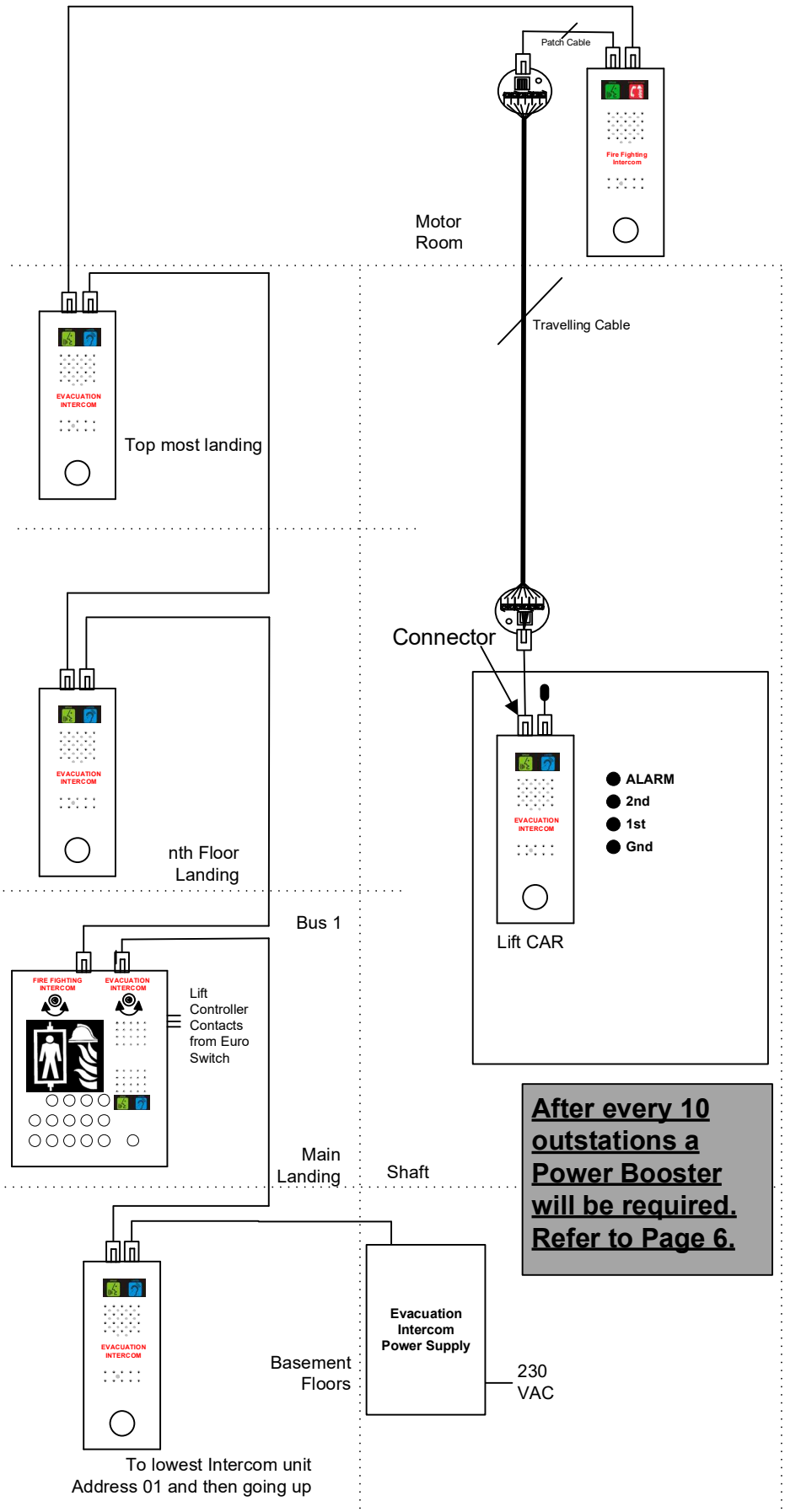
- **The EURO Switch has a set of contact (via multi-way cable) which can be connected to the lift controller to place the lift in Evacuation Mode or Fire Fighting Mode. These contacts operate at the same time as the Evacuation intercom is switched ON.**

- **The basic configuration of the system is that all the speakers are interconnected in a "Daisy Chain" starting form a Power Supply Box.**

To simplify the installation, we recommend the use of RJ45 Connectors on the end of CAT5 cable.

- **Check the RJ45 Cables with the RJ45 Cable tester provided with the Kit before powering up the system.**

- **To interface the Serial Evacuation System to an existing autodialler, there will be a need of Serial Car Speaker Interface Unit.**



After every 10 outstations a Power Booster will be required. Refer to Page 6.

Fire Fighting Intercom Operation:

When the system is operated via turning ON the Fire Fighting Switch on the panel, a three way communication link will be turned ON between the Panel, Motor Room Speaker & the Lift Car Speaker.

"Press to speak" button is provided on the Panel and on the Motor Room speaker to communicate to the other speakers.

Turning OFF the Fire Fighting switch will turn off the communication.

Evacuation Intercom Operation:

When the system is operated via turning ON the Evacuation Switch on the panel, a speech link can be provided to allow communication between the Master Switching Panel and any of the outstation speaker boxes in the system.

All calls will be registered on the Master Switching Panel when the "Call" button is pressed on any of the Outstations.

To answer a call, the Evacuation Manager, simply presses the flashing button for the corresponding outstation. At this point a voice link will be opened. Once the conversation has finished, the pressing of the fully illuminated button, on the Master Switching Panel, will now cancel the call.

If for any reason the Evacuation Manager wishes to speak to an outstation, he simply presses the button corresponding button of the outstation. A voice link will be opened and the button will fully illuminate.

NB: Acoustic feedback will occur when the Lift car doors open if the Main Switching Panel is near the Lift car's opening. (Use a relay on the "door open" signal to avoid feedback problems).

NB: Fire Fighting will have priority over the Evacuation. i.e. if the evacuation switch and fire fighting switch are turned ON at the same time, the system will operate as the Fire Fighting Intercom system.

Note: All the interconnection cables must be Screened and Twisted.

Example of Stand-alone Serial Evacuation & Fire Fighting Intercom system

Drawing: SEREVA01 Block 19/09/13

Windcrest (UK) Ltd

Tel: 0208 795 0333
Fax: 0208 795 0444

After every 10 outstations a Power Booster will be required. Refer to Page 6.

Motor Room (This area represents the Motor Room)

Evacuation Intercom Power Supply

230 VAC

CT5 Cable

6 way

Top most landing

Windcrest AD1000EN-4R System

Car Speaker Interface

GSM/Phone Line

6M CT5 Cable

Fire Fighting Intercom

BT Socket

6 way

230 V AC

CT5 Cable

CT5 Cable

12 Way Travelling

Bus 1

ALARM PUSH N/O Contacts Voltage Free

6 Way LSF (Blue)

FIRE FIGHTING INTERCOM

EVACUATION INTERCOM

Lift Controller Contacts from Euro Switch

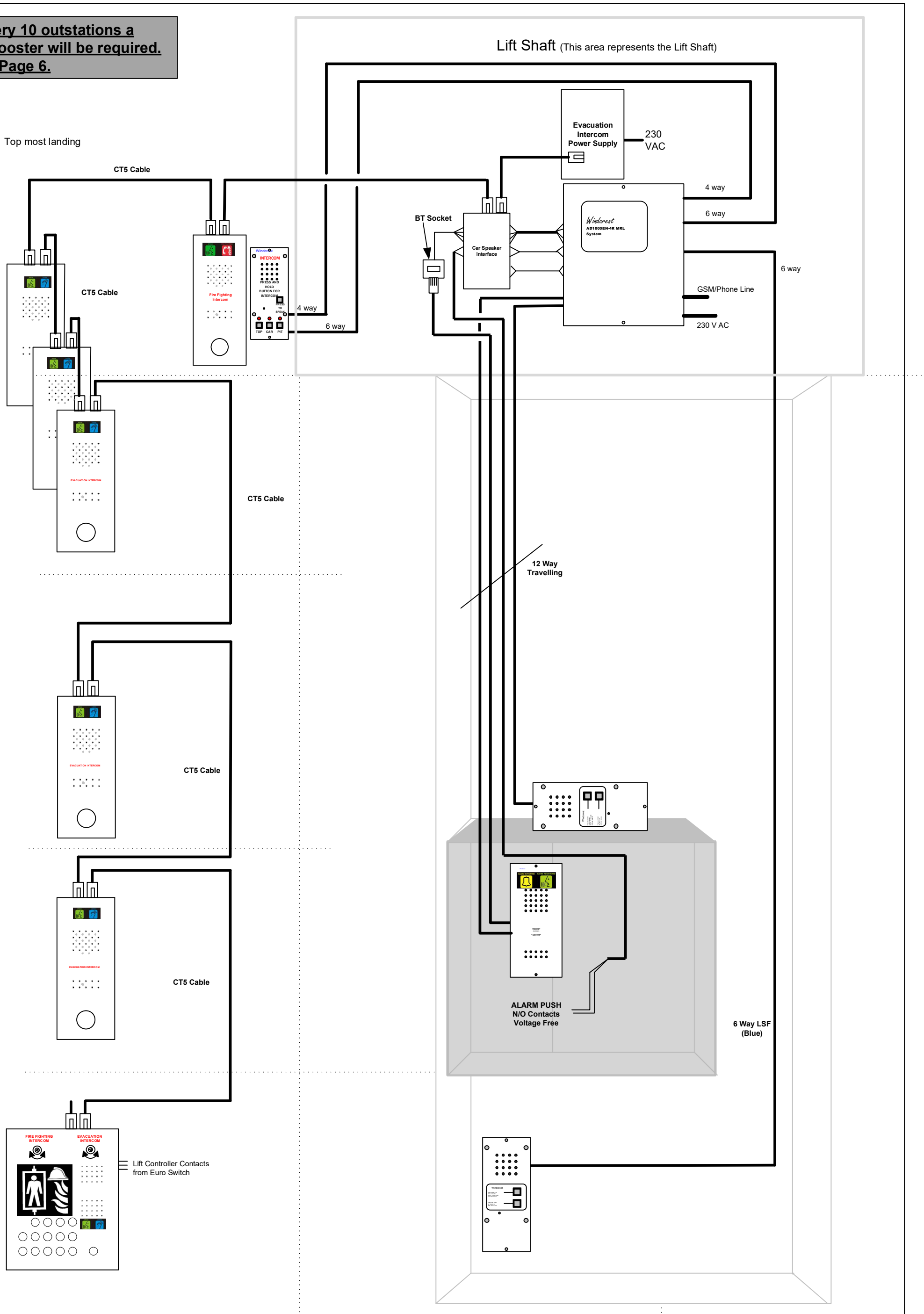
Example of Fire Fighting & Evacuation System + EN4 System

Drawing: SEREVA01 Block 13/09/13

Windcrest (UK) Ltd

Tel: 0208 795 0333
Fax: 0208 795 0444

After every 10 outstations a Power Booster will be required. Refer to Page 6.



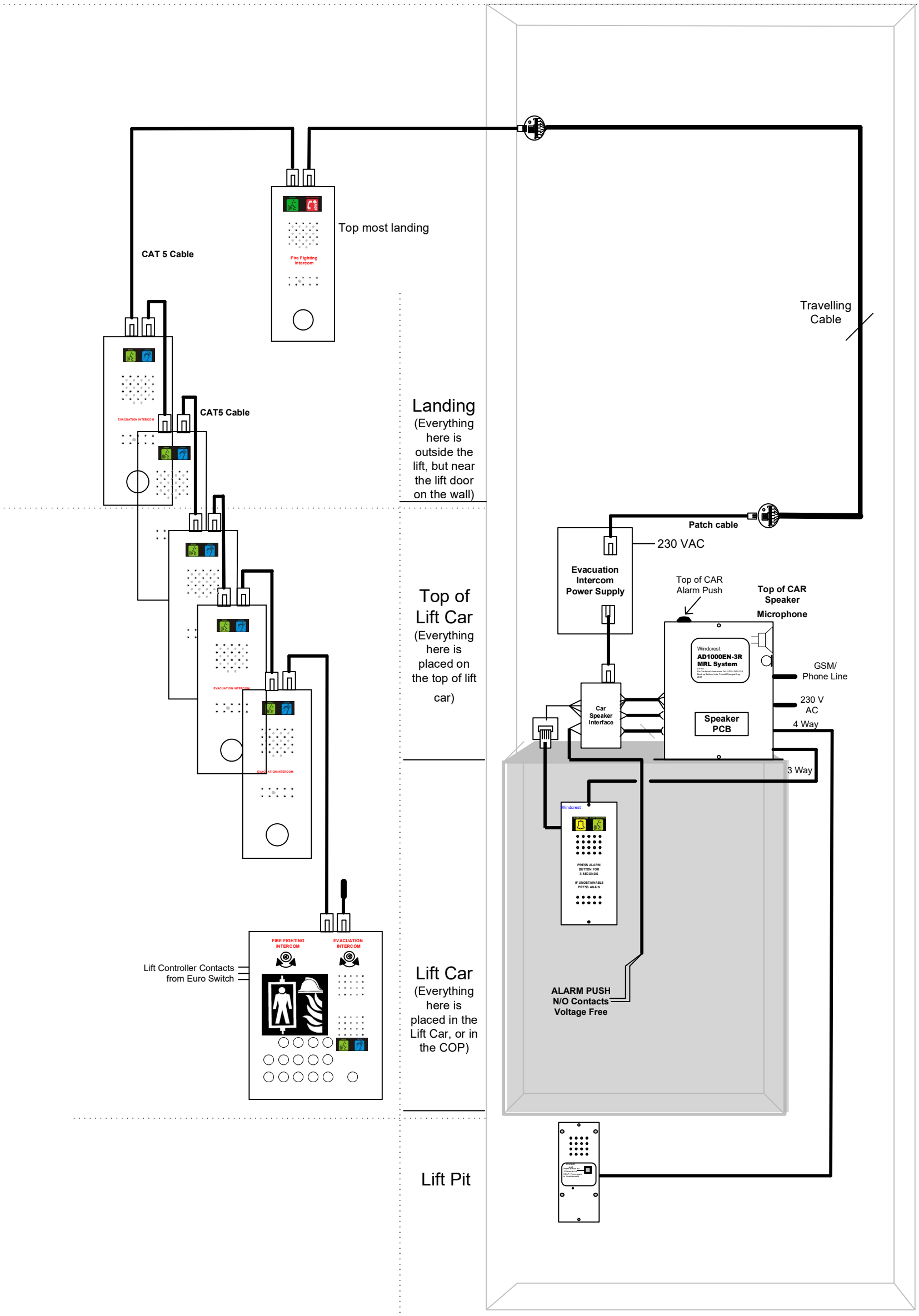
Example of Fire Fighting & Evacuation System + EN4 MRL System

Drawing: SEREVA01 Block 13/09/13

Windcrest (UK) Ltd

Tel: 0208 795 0333
Fax: 0208 795 0444

After every 10 outstations a Power Booster will be required. Refer to Page 6.

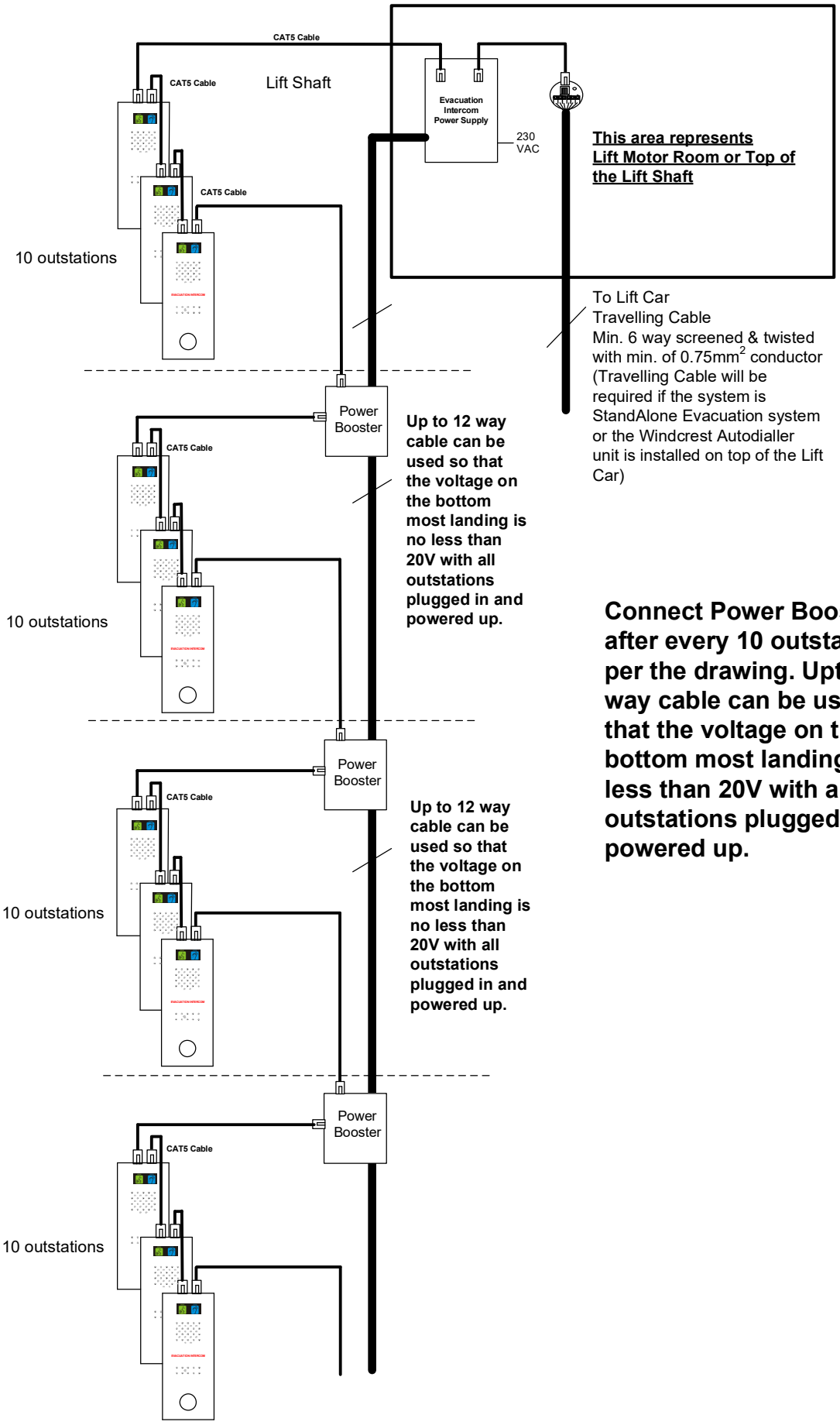


Example of Fire Fighting & Evacuation System + EN3 System

Drawing: SEREVA01 Block 03/12/13

Windcrest **(UK) Ltd**

Tel: 0208 795 0333
Fax: 0208 795 0444



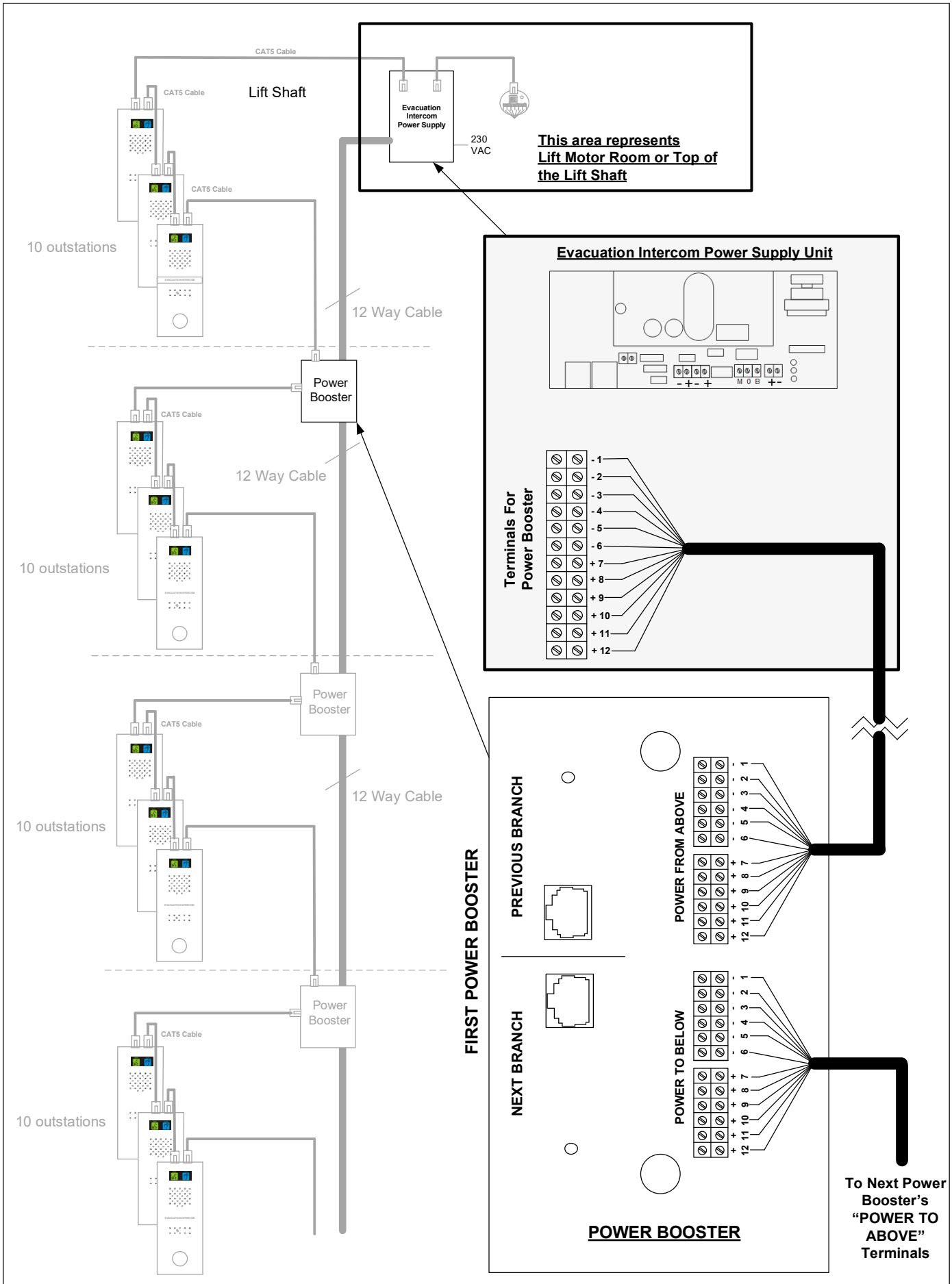
Connect Power Booster after every 10 outstations as per the drawing. Upto 12 way cable can be used so that the voltage on the bottom most landing is no less than 20V with all outstations plugged in and powered up.

Power Booster Wiring

Drawing: SEREVA01 Block 16/11/19

Windcrest (UK) Ltd

Tel: 0208 795 0333
Fax: 0208 795 0444

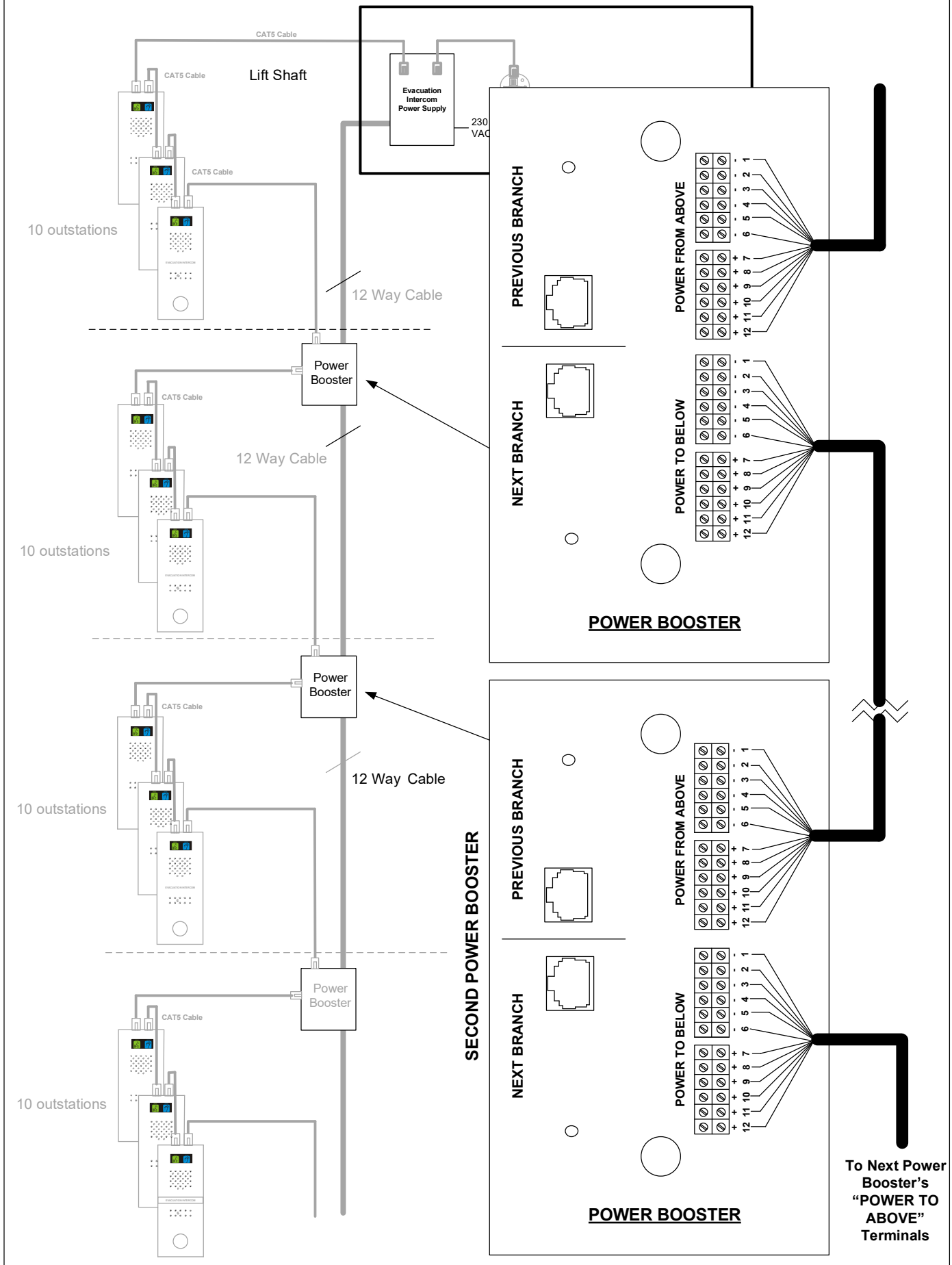


PSU to Power Booster Wiring

Drawing: PSUtoBooster 03/01/2023

Windcrest (UK) Ltd

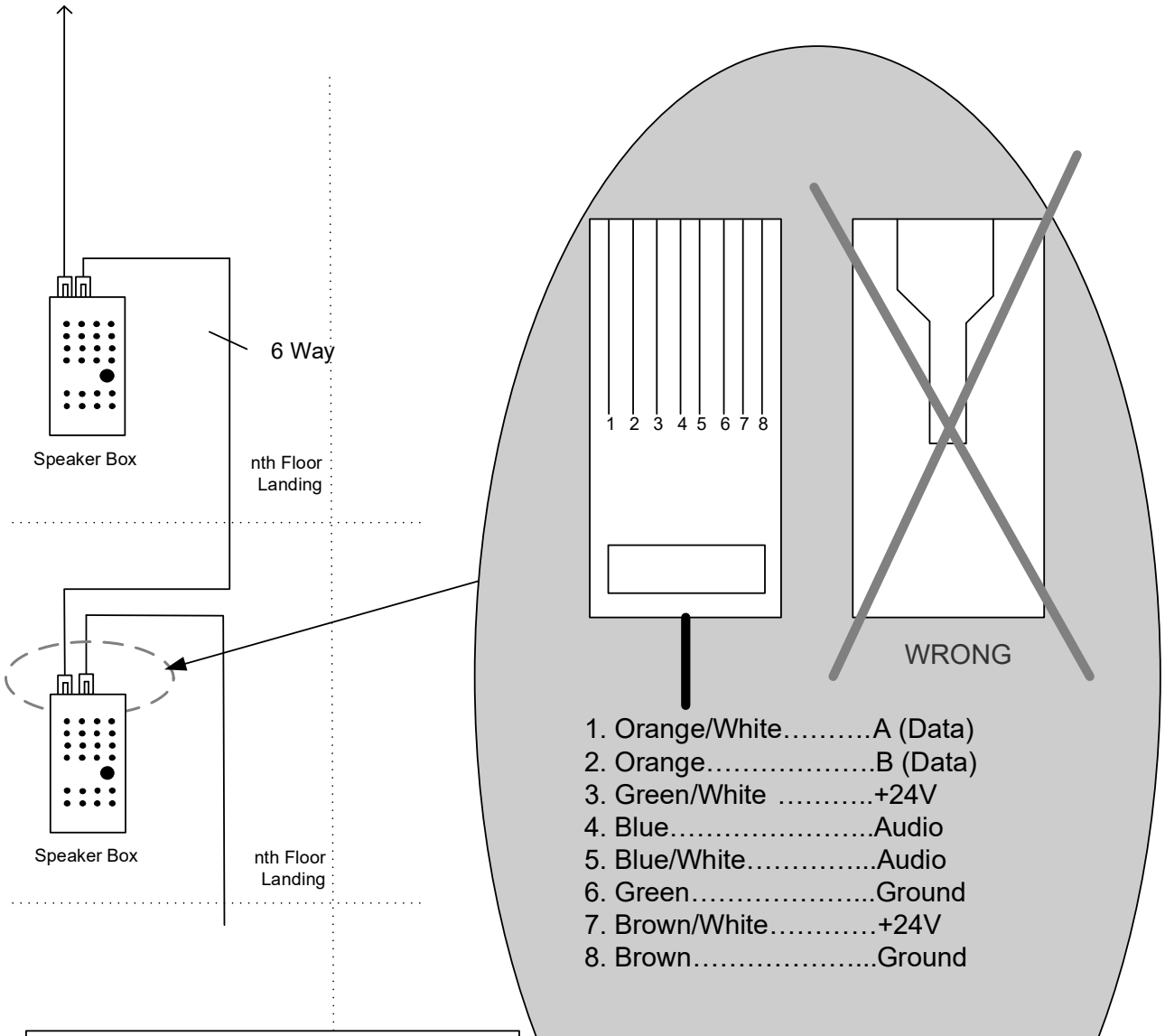
Tel: 0208 795 0333
Fax: 0208 795 0444



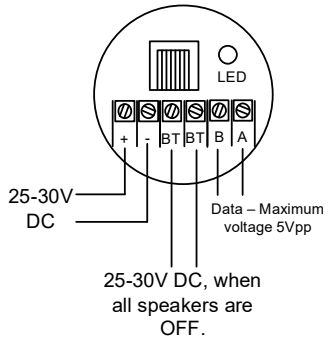
Power Booster to Power Booster Wiring

Drawing: Booster-Booster 03/01/2023

Windcrest (UK) Ltd
Tel: 0208 795 0333
Fax: 0208 795 0444



RJ45 to Terminal

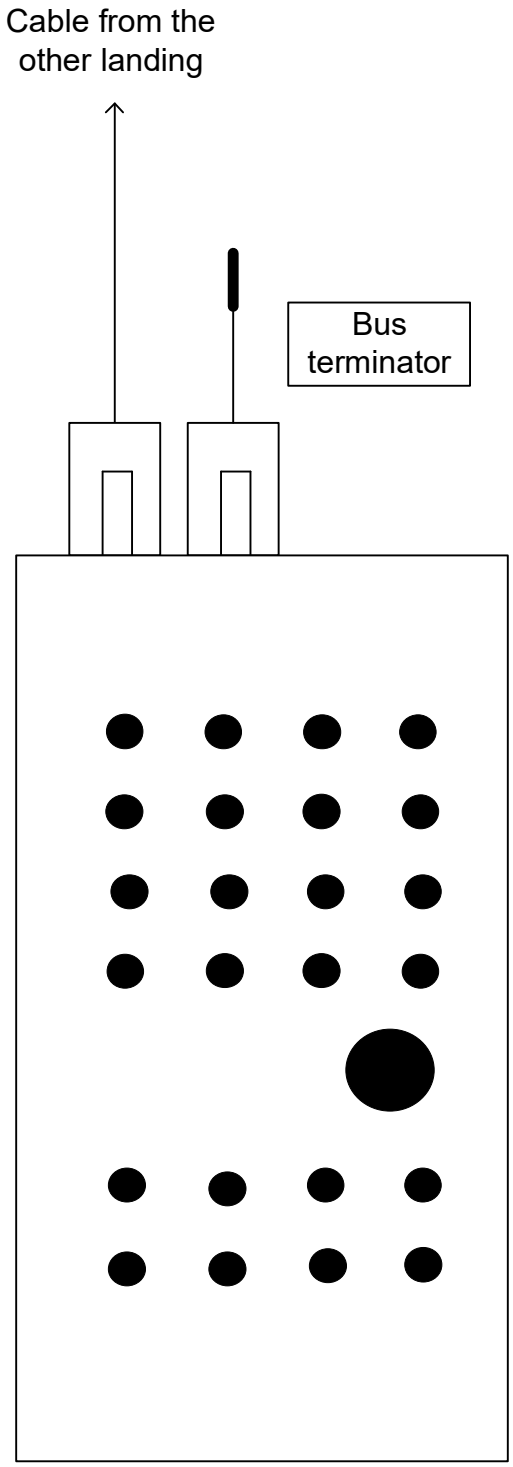


For Troubleshooting, connect the RJ45 to Terminal to the Cable and check the above readings. If the readings are different than above, please contact Windcrest.

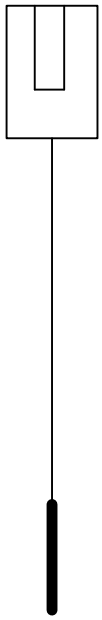
RJ45 Plugs Wiring

Drawing: SEREVA Landings
03/09/10

Windcrest (UK) Ltd
Tel: 0208 795 0333
Fax: 0208 795 0444



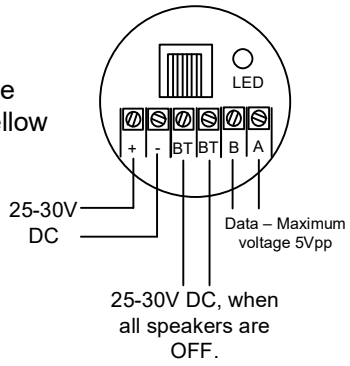
Top Most Landing



Connect bus terminator to the last outstation on each bus.

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.

RJ 45 Bus Terminator & RJ45 to Terminal	Drawing: SEREVA Landings 03/09/10	Page 10
	Windcrest (UK) Ltd	Tel: 0208 795 0333 Fax: 0208 795 0444

Evacuation Functions

Interconnection

Connect the main Evacuation Panel to the Control Box. Connect all the Landing Speakers to the bus. Lift Controller Contacts are provided on the Main Panel.

Lift Controller Spare Contacts:-

Blue or Orange - Common
Green or White- Normally Open
Yellow- Normally Closed

Operation

To activate the evacuation system, place the EURO switch in the ON position. All the LEDs for the Landing Speakers and the Lift Car will flash for 5 seconds when the system is analysing the Outstations. After 5 seconds, the LEDs on the main Panel will be ON for the outstations which are present working (i.e. Data Link is Working) for 3 seconds. The “Listen” Pictogram will be ON to indicate that the system is ready.

At the all Landing Speakers Call Button will Flash slowly to Indicate System is ON.
On pressing the CALL button on any outstation, the LED will start flashing faster to indicate placement of a call. At the same time the corresponding LED for that outstation and a buzzer will operate. The flashing and buzzing will continue till the person on the Main Control Panel answers the call by pressing the corresponding button. At the point the voice link is opened, the LED on the calling outstation and main panel will remain ON till the voice link is terminated.

When Voice Link is active, press to speak button will control the speech from the master station. When press to speak button is released, Main Control Panel’s microphone will be muted and outstation microphone will be ON, and Main Control Panel’s microphone is muted. When press to speak button is pressed and Hold, Outstation microphone will be muted and Master Panel microphone will be ON. Pictograms at the Main Control Panel and the Landing Speaker will show the status of speak/listen. i.e. when the speaker box’s Mic will be ON, “Speak” Pictogram will illuminate and when the Speaker Box’s Mic will be OFF, “Listen” Pictogram will illuminate.

A call can be made to any of the Outstation by simply pressing the button for that outstation on the Main Control Panel. As soon as the button is pressed the LED on both the outstation and the Master Panel will be steady ON and a two way communication is possible via press to speak button on the Main Control Panel.

The call can be terminated by the pressing the same button again at which point LEDs on the outstation and Main Control Panel will go off and the Pictograms at the Landing Speakers will be switched off and at the Main Panel “Listen” Pictogram will illuminate to indicate the system status.

When Evacuation Switch is turned OFF, Both the Pictograms at the Main Control Panel will be switched off and Push Button LED at all the Landing Speakers will be turned OFF.

The buzzer will sound when the Low Battery is detected.
Note:- On powering up the system (i.e. Mains/Battery Connected), all the buttons including Speak and Listen Pictograms will flash for 10 seconds. Landing Buttons will flash for 2 seconds.

Windcrest **LiftBits Ltd** **Tel: 0208 795 0333** **Fax: 0208 795 0444**

Fire Fighting Function

Interconnection

Connect all the Landing Speakers and the Motor Room speaker to the bus. Lift Controller Contacts are provided on the Main Panel.

Lift Controller Spare Contacts on the Fire Fighting Switch:-

Orange - Common
White- Normally Open
Yellow- Normally Closed

Operation

To activate the Fire Fighting system, place the EURO switch in the ON position. Push buttons on all the Landing Speakers and the Lift Car Speaker will switch off and disabled. The three way communication link will be ON, between the Fire-Evacuation Panel, Motor Room and the Lift Car.

To indicate the Fire Fighting Intercom is ON, both Speak & Listen Pictograms will be turned ON, on the Lift Car Speaker, Fire Fighting Pictogram will be turned ON, on the Motor Room Speaker and Listen Pictogram will be turned ON, on the Fire-Evacuation Panel.

“Press to speak” button is to be used to speak from Fire-Evacuation Panel & the Motor Room Panel.

All the other buttons apart from “Press to Speak” will be disabled on the Fire-Evacuation Panel.

Note:- The Fire Fighting Intercom will have priority over the Evacuation Intercom.

Windcrest **LiftBits Ltd** **Tel: 0208 795 0333** **Fax: 0208 795 0444**

All 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	OFF	OFF	OFF	OFF	OFF	OFF
Motor Room Fire Fighting Speaker	X	X	X	X	X	X

Master Panel :- This address will define the number of outstations (Excluding Lift Car (Default)). i.e. If the system has 21 outstations + Lift Car then following is the set up.

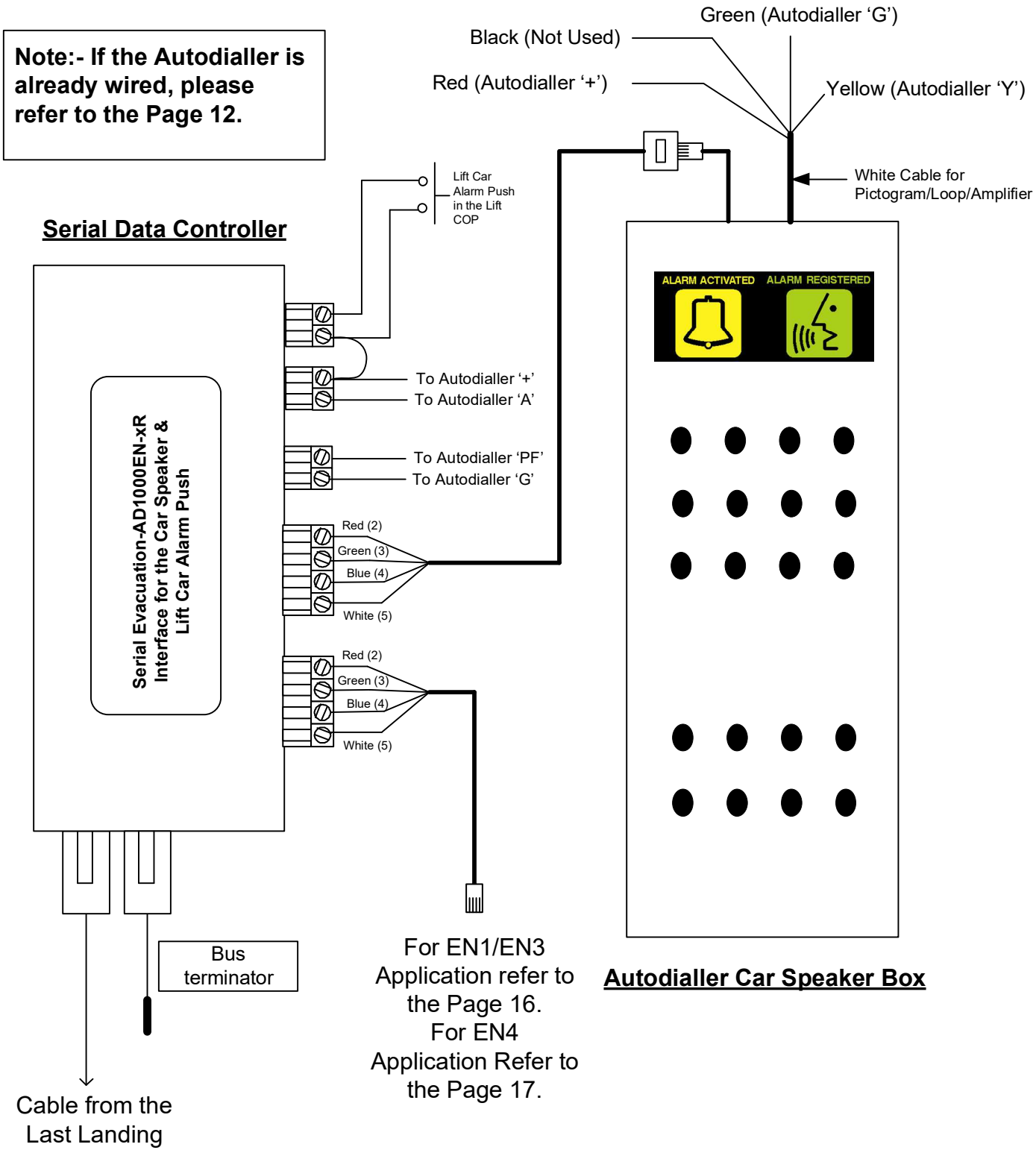
Master Panel	ON	OFF	ON	OFF	ON	X

Master Panel is addressed from the factory.

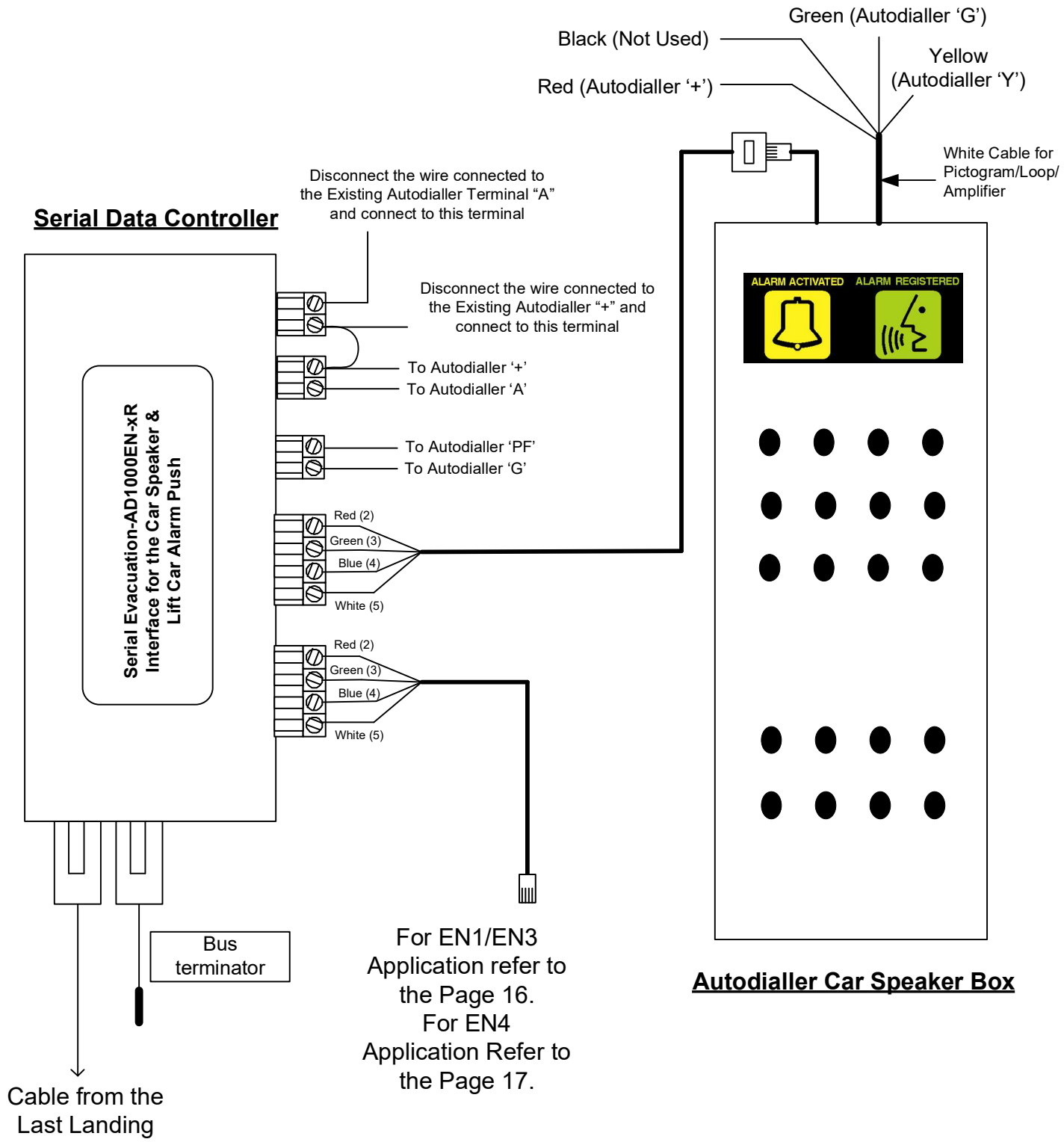
Evacuation Landing Speaker	1	2	3	4	5	6
Landing 1(Bottom Most)	ON	Off	Off	Off	Off	X
Landing 2	Off	ON	Off	Off	Off	X
Landing 3	ON	ON	Off	Off	Off	X
Landing 4	Off	Off	ON	Off	Off	X
Landing 5	ON	Off	ON	Off	Off	X
Landing 6	Off	ON	ON	Off	Off	X
Landing 7	ON	ON	ON	Off	Off	X
Landing 8	Off	Off	Off	ON	Off	X
Landing 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

Windcrest **LiftBits Ltd** **Tel: 0208 795 0333** **Fax: 0208 795 0444**

Note:- If the Autodialler is already wired, please refer to the Page 12.



NB: Ignore this drawing for the StandAlone Evacuation Installation. This drawing is applicable ONLY for AD1000 Range of Autodiallers which is connected to a Serial Evacuation System.



NB: Ignore this drawing for the StandAlone Evacuation Installation. This drawing is applicable ONLY for AD1000 Range of Autodiallers which is connected to a Serial Evacuation System.

Serial Car Speaker Interface with Existing Windcrest Autodialler	Drawing: SER CAR + Autodialler 03/09/10	Page 15
	Windcrest (UK) Ltd	Tel: 0208 795 0333 Fax: 0208 795 0444

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

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.

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

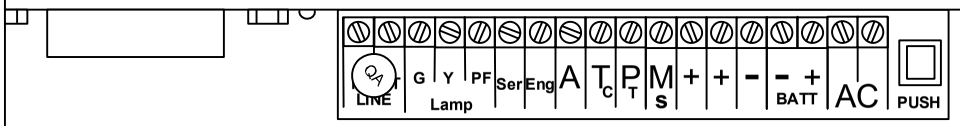
Telephone Cable to Exchange or PABX if in an Office Building

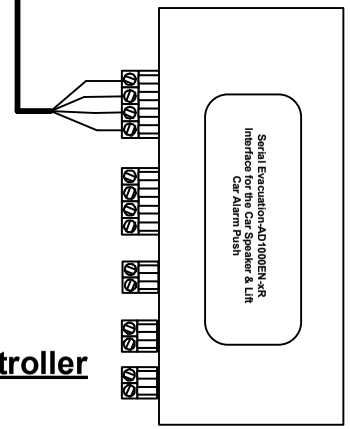
Use Terminals A & B or 2 & 5 ONLY

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

2 Way

Trailing Cables Screened and Twisted if Possible





Serial Data Controller

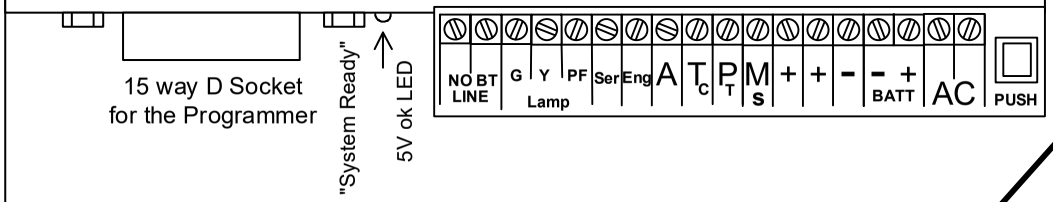
AD1000 EN 1 & Serial Controller

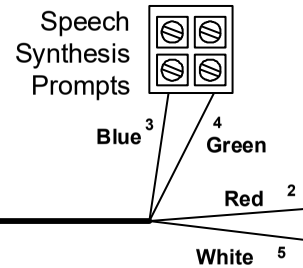
24/06/12

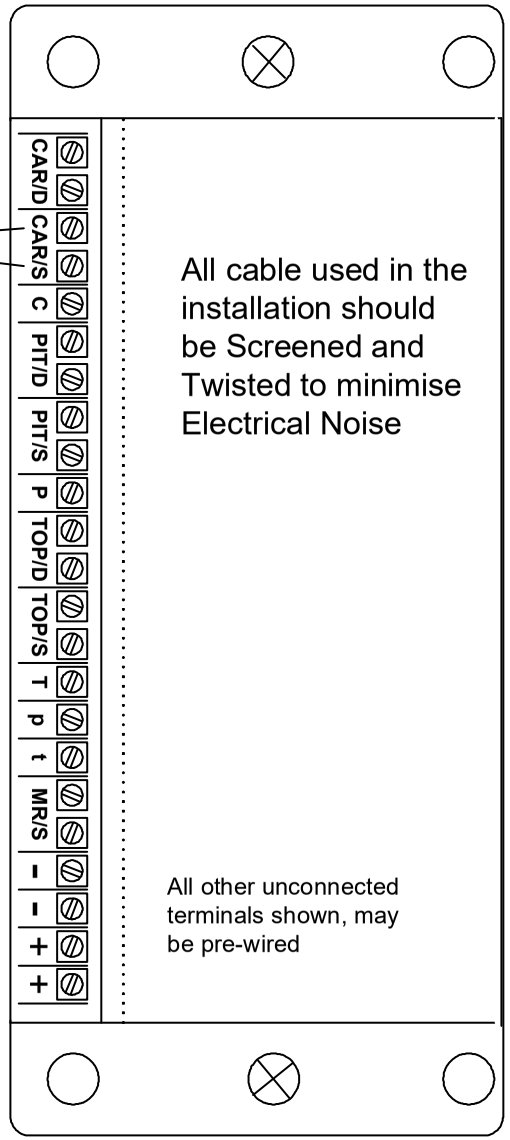
Windcrest
Tel: 0208 795 0333
Fax: 0208 795 0444

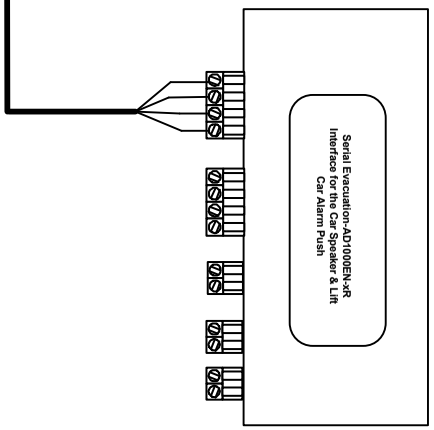
Connect the lead with the BT Plug into the phone socket of the Building's phone system. (The phone line Must be on 2 wires analogue system)

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







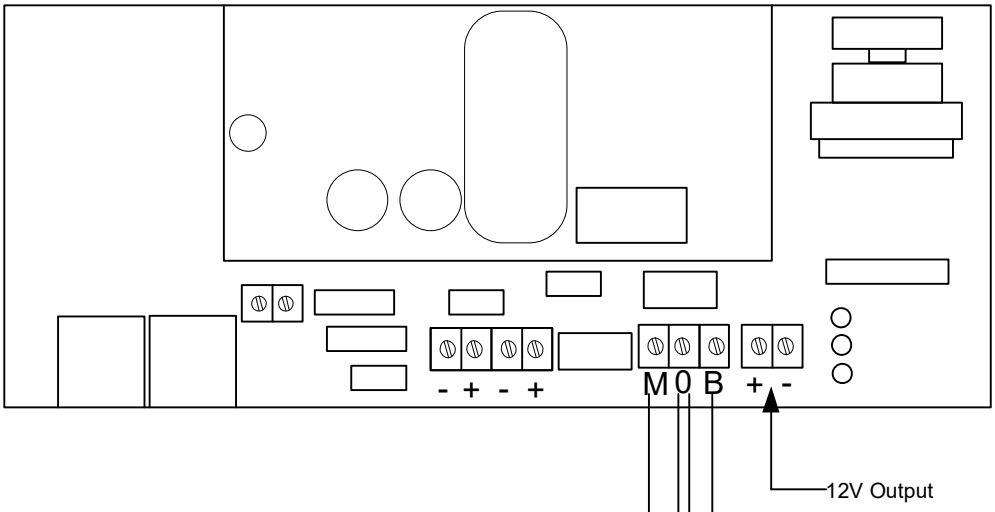


Serial Data Controller

AD1000 EN4 and Serial Data Controller

Date: 12/07/12

Windcrest
Tel: 0208 795 0333
Fax: 0208 795 0444



Mains Detection Relay Output
("0" - Common, "M" - Normally Open)
Mains Failure = Closed
Mains Good = Open

Low Battery Relay Output
("0" - Common, "B" - Normally Open)
Low Battery = Closed
Battery Good = Open

Low Battery & Mains Detection Output

Drawing: Mains & Batt

Windcrest (UK) Ltd
Tel: 0208 795 0333
Fax: 0208 795 0444