TECHNICAL MANUAL

25H/DDA
One button DDA audio intercom kit

VIDEX
The Power to Secure

INTRODUCTION

The door entry kit has the following features:

- **Electronic call tone -** Upon a call being initiated, the telephone will attract the attention of the occupant with up to ten warbled rings.
- **Timed door release -** Upon pressing the door release button on the telephone, a dry contact relay within the door panel will energise for 5 seconds.
- **Visual indication of call progress on the door panel –** In standby, the door panel call button will be illuminated awaiting being pressed. Upon pressing the button, the illumination will begin to flash and during the conversation and door release the button illumination will be off. Additionally three LED's indicate when the telephone is ringing (Red LED), when to speak (Yellow LED), and when the door is open (Green LED).
- **Call tone volume adjust –** The volume can be adjusted using a three position volume control located on the telephone.

COMPONENTS

The standard components of the kit are as follows:

- **Door panel (VR1N/DDA) -** A one button vandal resistant flush fitting door panel with large illuminated call button with raised letters and Braille.
- **Audio telephone (3111) –** A white ABS plastic wall mountable telephone with three position call tone volume adjust, door release button and spare service button.
- **Power supply (521) –** A 13.5Vdc DIN rail or wall mountable power supply unit capable of supplying up to 800mA continuous or 1A surge.

CONNECTIONS

DOOR PANEL

AMPLIFIER	
1	Receive speech from telephone (12Vdc on hook, 4Vdc off hook)
2	Transmit speech to telephone (12Vdc on hook, 1Vdc off hook)
3	Positive supply to amplifier (12Vdc)
4	Negative (0V) supply to amplifier
BUTTON	
SW	Normally open switch
SW	Other side of normally open switch
LAMP	One side of button illumination +12Vdc
LAMP	Other side of button illumination (Switched 0V)
CONTROL PCB	
5	Door release from telephone (Switched negative from 5Vdc)
4	Call tone out to telephone
Tr	Trigger from call button to initiate a call (Triggers on 12Vdc)
2	Handset lift detect line (12Vdc on hook, 1Vdc off hook)
Gnd	0V from power supply
+12	12Vdc from power supply
CO	Common connection of dry contact lock relay
NO	Normally open connection of dry contact relay
NC	Normally closed connection of dry contact relay

Speech volume adjustments are carried out at the door panel using a small trimmer driver.

Adjustment for speech volume level at the door station

Adjustment for speech volume at the apartment

TELEPHONE

Art.3111

The Art.3111 includes a three position call tone volume control, lock release push button and spare dry contact push to make button for other services. Up to three telephones can be connected in parallel on this system.

CONNECTIONS:-

	Function
4	Call tone in from door panel
6	Not used on this system
2	Receive speech from the door panel
1	Transmit speech to the door panel
3	0V
5	Switch 0V lock trigger command
8	Dry contact switch
9	

5

POWER SUPPLY

Art.521

The 521 PSU can supply 800mA constant or a 1A surge. The output is 13.5Vdc and is protected by a fall back circuit (No internal fuses on either the primary or secondary of the PSU. A fused spur should always be used with this type of PSU).

BLOCK DIAGRAM AND DOOR PANEL DIMENSIONS
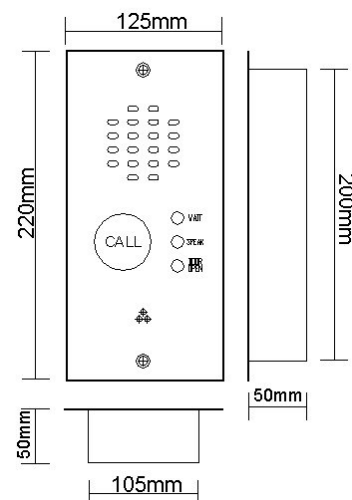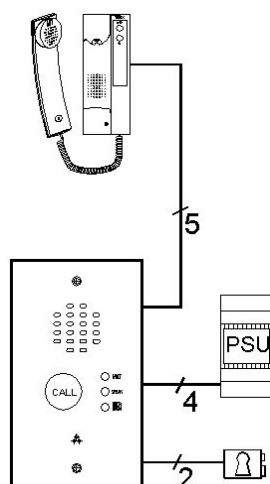
INSTALLATION

The wiring diagram towards the back of this manual should be followed carefully. Heavy duty conductors on wiring diagrams are shown heavily outlined, These wires should be doubled up.

- Check that all components are free from damage before installing (Do not proceed with installation in the event of damage).

- Keep all packaging away from children.

- Do not obstruct the ventilation openings or slots on any of the devices.

- All connections to mains voltages must be made to the current national standards (IEE Wiring regulations)

- Install an appropriate fused spur or isolation switch to isolate the mains.

- Isolate the mains before carrying out any maintenance work on the system.

- All intercom and access control cables must be routed separately from the mains.

Lock release protection : A diode must be fitted across the terminals on the lock release to suppress back EMF voltages. The diagram below shows the polarity of the diode when fitted to the release.
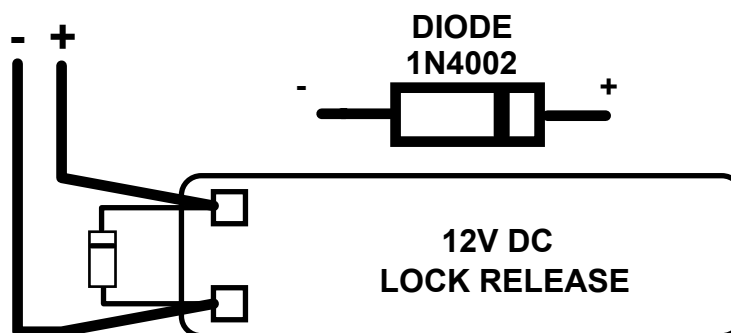
Cable size and type : When running cables for any intercom system, these cables must be installed separately from the mains cables. All multipair cables should be to CW1308 specification. (0.5mm twisted pair telephone cable). Max resistance = 10 Ohm.
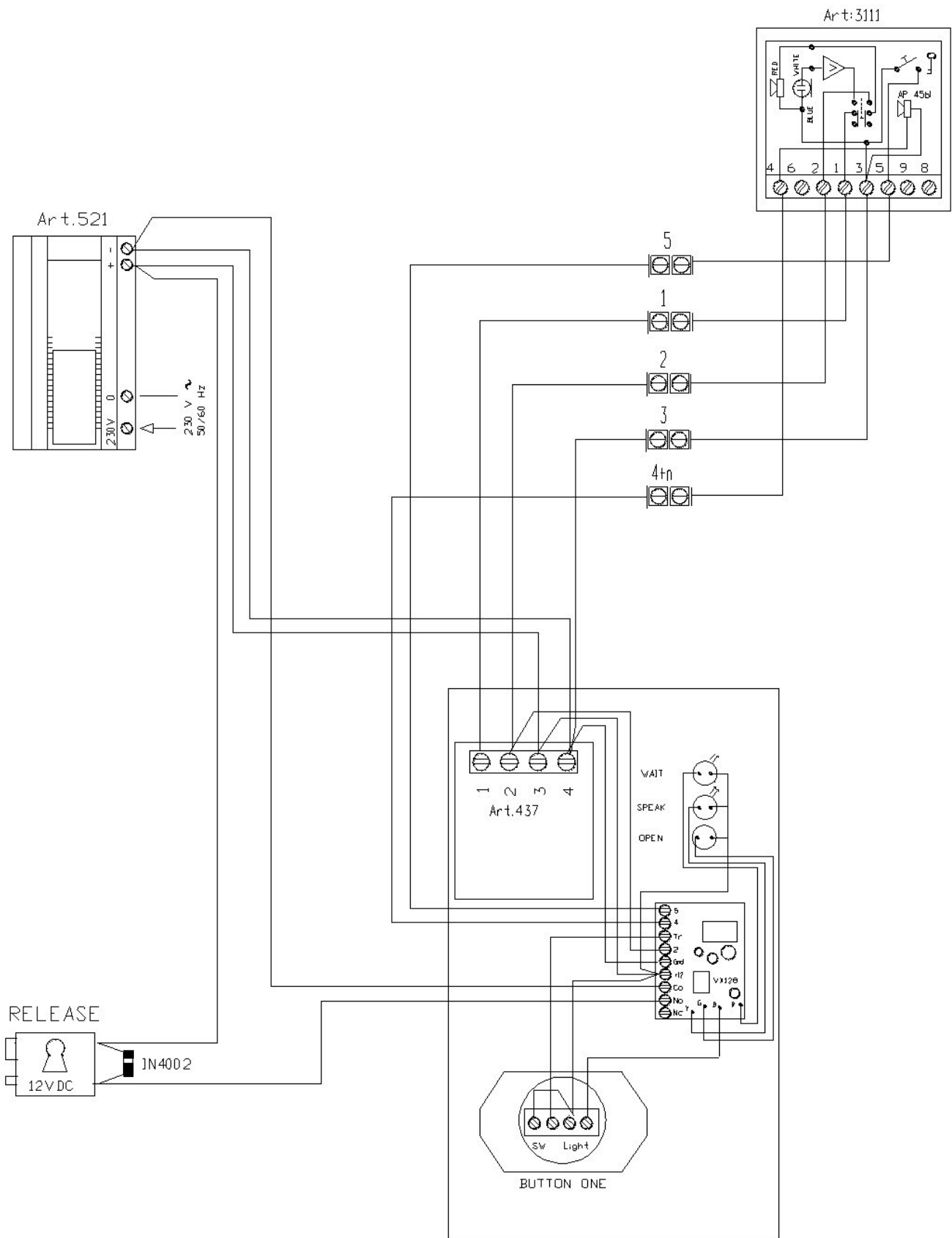Lock release wires should be doubled up. Max resistance = 3 Ohm
The cables sizes above can be used for distances up to 100m. On distances above 100m the cable sizes should be increased to keep the overall resistance of the cable below the RESISTANCES indicated above.
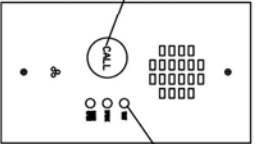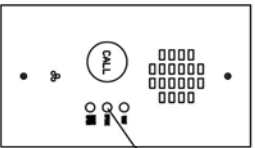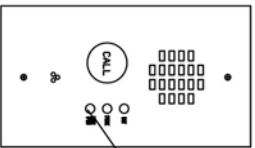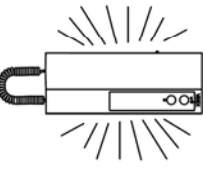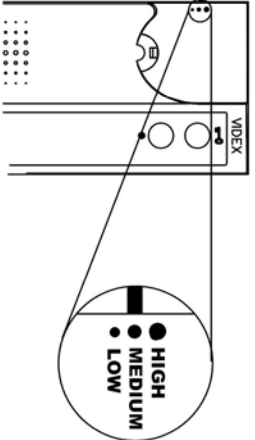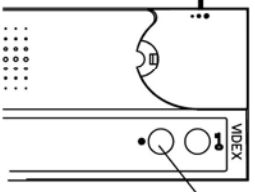
TESTING THE INSTALLATION

- Check all the connections have been made correctly and then power up the system.

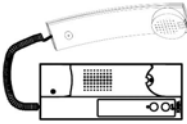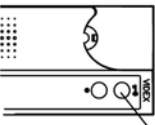- Call the apartment. Check for call tone to the apartment, speech in both directions and lock release.

- If the volume of speech needs to be adjusted, this can be done by adjusting the presets on the rear of the amplifier at the door panel as shown earlier in this manual.

- If the call tone volume needs adjusting this can be done at each handset (Three position slide switch on the telephone).

Art:3111

Art.521

5

1

2

3

4tn

WAIT

SPEAK

OPEN

Art.437

1 2 3 4

230V   0   230 V 50/60 Hz

RELEASE

12V DC   IN4002

VX126

BUTTON ONE

SW   Light

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VIDEX

USER INSTRUCTIONS

25H/DDA KIT

VXWD25HDDAUSER

CALLING AN APARTMENT

PRESS THE CALL BUTTON AND AWAIT A REPLY. THE BUTTON WILL BEGIN TO FLASH AND THE RED WAIT LED WILL ILLUMINATE DURING THE RINGING.

CALL BUTTON

WAIT LED

WHEN THE TENANT ANSWERS YOU MAY SPEAK. THE BUTTON ILLUMINATION WILL SWITCH OFF AND THE YELLOW SPEAK LED WILL SWITCH ON

SPEAK LED

THE TENANT WILL THEN EITHER OPEN THE DOOR OR HANG UP. IF THE DOOR IS OPENED THE GREEN DOOR OPEN LED WILL ILLUMINATE. WHEN THE TENANT HANGS UP THE BUTTON ILLUMINATION WILL SWITCH BACK ON.

DOOR OPEN LED

ANSWERING A CALL

WHEN A CALL IS PLACED TO YOUR APARTMENT, AN AUDIBLE TONE WILL BE HEARD FROM THE HANDSET.

PICKUP THE HANDSET AND SPEAK TO THE CALLER.

IF YOU WISH TO LET THE CALLER GAIN ACCESS, PRESS THE 'DOOR OPEN' BUTTON ON THE HANDSET. IF YOU DO NOT WISH TO LET THE CALLER GAIN ACCESS, SIMPLY HANG UP.

DOOR OPEN BUTTON

CALL VOLUME ADJUST

A SWITCH LOCATED ON THE TOP LEFT SIDE OF THE PHONE IS AVAILABLE TO ADJUST THE RINGING VOLUME. THREE POSITIONS ARE AVAILABLE, INDICATED BY THE THREE DOTS UNDER THE HAND PIECE.

VOLUME SWITCH

● HIGH
● MEDIUM
● LOW

SECOND BUTTON

THE SECOND BUTTON CAN BE USED FOR A NUMBER OF SERVICES INCLUDING OPENING GATES, ACTIVATING CAMERAS OR SWITCHING ON LIGHTS.

SPARE SERVICE BUTTON

TROUBLE SHOOTING

SYMPTOM	TEST
No speech from door panel	Check terminal 2 on the door amplifier PCB for continuity back to terminal 2 on the telephone
	Check for 12V on terminal 2 of the door amplifier (Use terminal 4 as the ground). Check this with and without a wire connected to terminal 2 to eliminate a short of on the wire.
	Check the voltage drops to approx. 1Vdc when the handset is lifted. (If not try another telephone)
	If all else fails try another amplifier at the door station
No speech from handset	Check terminal 1 on the amplifier for continuity back to the terminal 1 on the telephone
	Check for 12V on terminal 1 of the door amplifier (Use terminal 4 as the ground). Check this with and without a wire connected to terminal 1 to eliminate a short of on the wire.
	Check the voltage drops to approx. 4Vdc when the handset is lifted. (If not try another telephone)
	If all else fails try another amplifier at the door station
Phone does not stop ring when handset is lifted.	Check terminal 2 on handset for continuity back to the door panel VX128 control PCB's terminal 2.
Lock will not operate from telephone	Check terminal 5 on the telephone for continuity back to terminal 5 on the door panel VX128 control PCB.
	Check the voltage on terminal 5 of the handset. 5Vdc in standby dropping to 0V when the release button is pressed.
Lock operates as soon as the handset is lifted.	Check for shorts across terminal 5 of the telephones and other cables.
	Check terminal 5 voltage. Should be 5Vdc when the button is not being pressed.
Nothing happens when call button is pressed	Check power to the VX128 PCB in the door panel. Should be 12Vdc.
	Check the connections on the call button.
No call tone to telephone but speech and lock ok when handset is lifted	Check terminal 4 on the telephone for continuity back to terminal 4 on the VX128 PCB in the door panel.
Hum on the speech lines	Ensure all intercom cables do not run close to higher voltage cables
	Try another amplifier at the door panel.

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