

# Direct Dialling Intercom



# 1, 4, KEYPAD & HPU INTERCOM STATIONS



**MODEL: VDL-441**  
One button slave intercom station



**MODEL: VDL-444**  
Four button slave intercom station

## 'The Jacques Direct Dialling Intercom Series Models'



**MODEL: VDL-44K**  
Keypad slave intercom station



**MODEL: HPU-5D**  
Direct Dial Help Point Uni



## DESCRIPTION

The Jacques Direct Dialling Intercom has new programming, scheduling, memory and access features and capabilities. These new features have been added to the previous JDDI-1 Series. The call quality, vandal and water resistant features will remain as standard, while the additional capabilities make the product ideal for large commercial buildings and residential complexes.

Available in stainless steel and architectural designs the Jacques Direct Dialling Series are stylish while providing high quality voice communications and access control functionalities.

The Jacques Direct Dialling series of intercoms are a range of professional standalone units designed for easy connection to new and existing Public Switched Telephone Networked (PSTN)/Public Branch Exchange (PBX) telephony systems. They dial preconfigured phone numbers (a remote telephone) when the front panel buttons are pressed. The units operate as a hands free, vandal and water resistant interface to a building telephone system.

## FEATURES

- Standalone, robust water and vandal resistant construction
- High audio quality for crisp, clear conversations (limited by telephone network bandwidth)
- Retrofit ability – for buildings with existing telephone infrastructure
- Two configurable relay outputs for activation of door locks, gates and security monitoring (selectable and actionable from answering telephone)
- Easy integration into Jacques networked intercom systems (via the Jacques Exchange Line Interface (ELI) series modules)
- Real time clock for day/night dialling

## 'excellent audio quality for crisp, clear conversations'

### Call Progress Detection & Programmed Dialling:

The Jacques Direct Dialling Series will detect dial tone, call busy and ring back tones, and automatically hang up upon call disconnection. Should a call busy signal be detected the programming sequence dialling feature will activate. In this instance if one number is busy the Direct Dialling Intercom will dial the next programmed number for that button. Up to 4 programmed dialling numbers are available. The inclusion of a real time clock enables additional configuration options for each number (or group of 4 numbers). For instance, if the intercom is installed in a residential apartment complex, an individual apartment can specify they would like any calls made from the intercom to be directed to a specific phone number between the hours of 9 to 5, and after 5 the call be diverted to another number.

international phone numbers need dialling. This additional number memory storage makes the Direct Dialling Intercom ideal for large commercial building entrances or residential apartment blocks.

### Access Control:

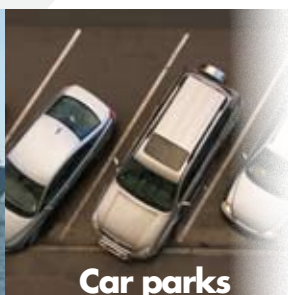
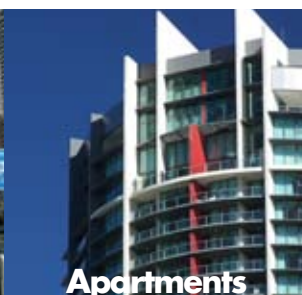
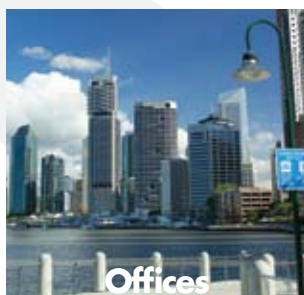
The new series will feature a separate input for remote dialling or relay triggers. Key code press combinations or input sensing can activate door or gate access controls or CCTV. External devices such as access card readers or finger print scanners can be attached to the intercom relays for additional security. These relay activations can be pin protected. Pin codes can be changed as desired.

### Additional Memory & Number Scheduling:

The Jacques Direct Dialling Series will have the capability to store up to 1000, 15 digit numbers in a non-volatile memory, with the ability to merge stored numbers to create numbers larger than 15 digits. This function is ideal for situations where caller extensions (via a PABX) or

### Configuration:

Dial number and options programming are available via RS-232 interface or DTMF tones from a remote telephone. This enables easy configuration via a PC that can be connected to the system via the interface.



## OPERATION

### Dialling

1. Pushing the call button on the Direct Dialling intercom station sets up the call. This dials one of the telephone numbers that are stored inside the unit via the telephone network.
2. The call is connected as soon as the receiving telephone is answered.
3. When connected, the caller can talk/listen totally hands free and the answering telephone can activate the two relays in the Direct Dialling intercom by operating the telephone keypad buttons.

### Programming

Pre-programmed telephone numbers can be easily changed at anytime, by simply dialling into the Direct Dialling Intercom Station, keying in an access code and making the respective changes. As these functions are performed, confirmation tones are heard at the handset.

### Relay Switching

Two remote switching relays are available at the Direct Dialling Intercom Station, and can be activated:

1. Automatically on pressing the call button or on call connect (VDL-441 & VDL-444)
2. Manually by the telephone keypad (VDL-441 & VDL-444)
3. By pressing in a pre-programmed code (VLD-44K)

These relays can control boom gates, door locks, security CCTV systems and most other equipment that has remote control inputs.



# 'separate input for remote dialling or relay triggers'

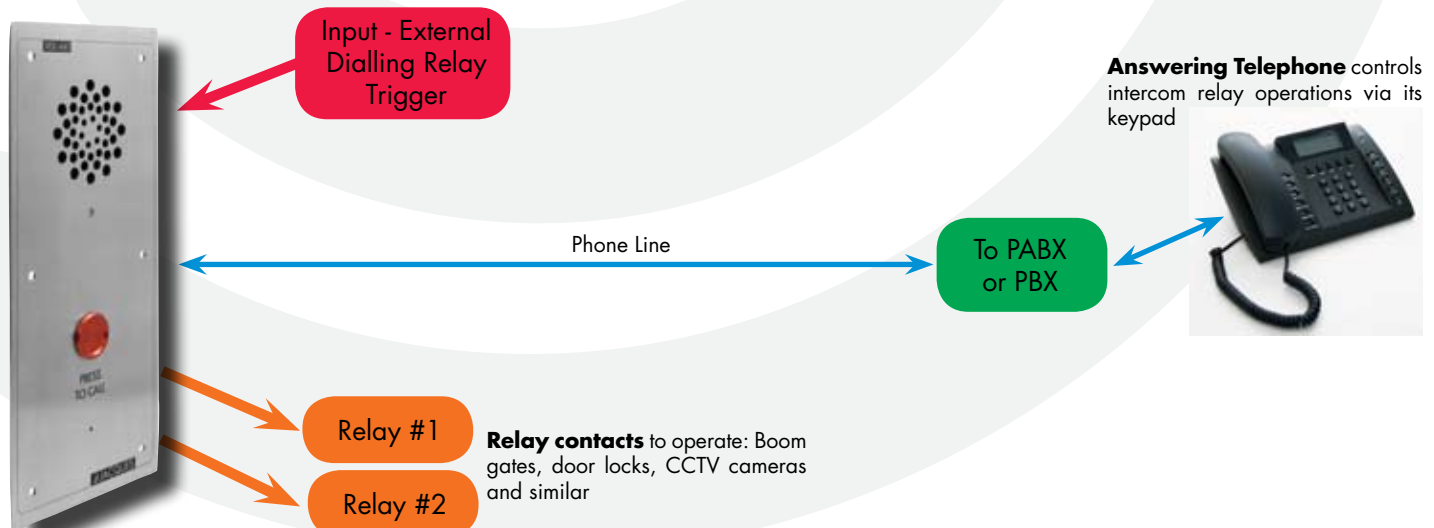
## APPLICATIONS

Typical applications include entrances to:

- Corporate buildings and small offices
- Factories
- Shipping ports
- Apartment buildings
- Residential dwellings
- Marinas
- Anywhere where secure access is required

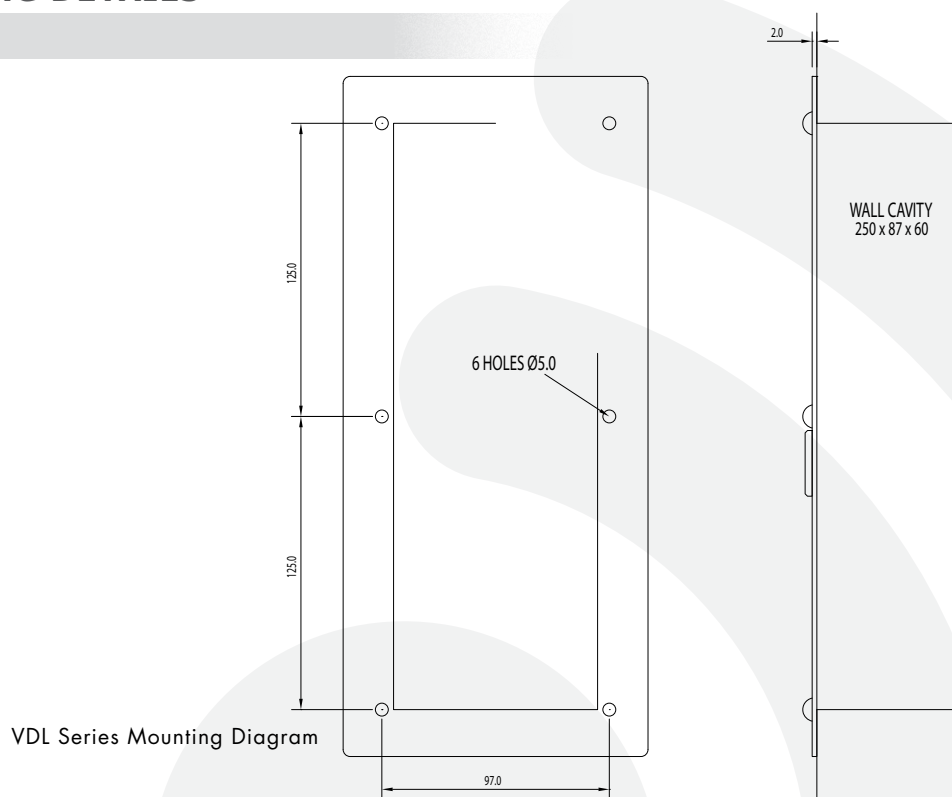
## BLOCK DIAGRAM

The following block diagram shows how a Direct Dialling Intercom (VDL-441) is used to call a remote telephone, which in turn controls the intercom relays, using the PSTN or PBX as the connection.



## MOUNTING DETAILS

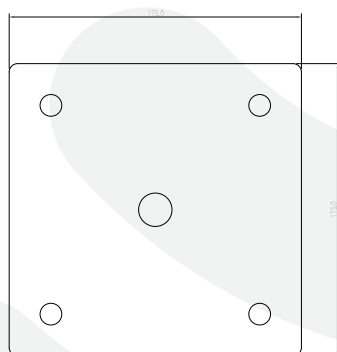
### VDL Series



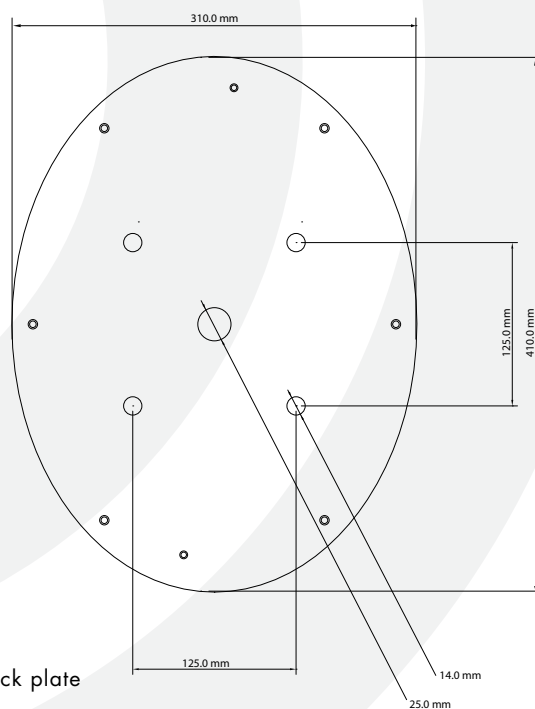
VDL Series Mounting Diagram

### HPU-5D Series

- Four M8-M10 screws through the back plate fix the HPU in position
- If fixing to a metal surface such as a square steel tube, drill and tap the post
- When mounting to a masonry wall with an uneven surface use the HPU-5 series wall mounting plate (51095)
- To maintain the IP rating against rain and dust, use the HPU-5 series wall mounting gasket and silicone sealing compound



HPU-5 series 51095 wall mounting plate



HPU-5 series back plate

## ORDERING INFORMATION

51109	VDL-441	Direct Dial Intercom, 1 button
51150	VDL-444	Direct Dial Intercom, 4 button
51269	VDL-44K	Direct Dial Intercom, keypad
51151	HPU-5D	Direct Dial Help Point Unit, 1 button
51229	HPU-5D-i	Direct Dial Help Point & Information Unit, 2 button
51095	WMP-5	Wall mount plate for HPU series
50971	24 V d.c. 2 A	Plug pack

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## SPECIFICATIONS

### GENERAL

#### VDL-441, VDL-444, VDL-44K

#### HPU-5D, HPU-5D-i

<ul style="list-style-type: none"> <li>Power source</li> <li>Maximum current</li> <li>Standby current (on-hook, no relays activated)</li> <li>Dimensions (W x H x D)</li> </ul>	<p>(12 – 32) V d.c. 300 mA 45 mA @ 24 V (max. TBD mA @ 12 V)</p> <p>(130 x 290 x 45) mm without terminating connectors 1.35 kg 2 mm SS front panel, zinc plated steel back box</p>	<p>(320 x 420 x 120) mm</p> <p>8.1 kg 3 mm SS front panel, cast aluminium housing, powder coated</p>
<ul style="list-style-type: none"> <li>Weight</li> <li>Construction</li> </ul>		
<ul style="list-style-type: none"> <li>Operating temperature</li> <li>Storage temperature</li> </ul>		<p>(0 - + 50) °C (-10 - + 60) °C</p>

### RELAYS, INPUTS AND INDICATORS

<ul style="list-style-type: none"> <li>Number of relays</li> <li>Relay contact type</li> <li>Relay contact rating</li> <li>External input</li> <li>Call LED</li> <li>Call buttons</li> </ul>	<p>2, controlled automatically or remotely via DTMF Change over (3 contacts per relay: NO, NC, COM) 2 A, 24 V d.c. Self powered opto-coupled (not isolated) Green, high intensity, 5 mm diameter</p> <p>1 x 28 mm diameter (VDL-441) 4 x 19 mm diameter (VDL-444) red piezo button(s)</p>	<p>1 x 28 mm diameter, red piezo button</p>
<ul style="list-style-type: none"> <li>Keypad</li> </ul>	<p>Yes (VDL-44K only), 12-button</p>	<p>No</p>

### AUDIO CHARACTERISTICS

#### Line to Speaker

- Output power (speaker)
- Output frequency response (-3dB)
- Noise & distortion Line to Speaker

1.5 W rms  
(150 – 4000) Hz  
< 2.5% @ speaker terminals for -10dBu  
line level and default volume level

#### Microphone to Line

- Output frequency response (-3dB)
- Noise & distortion Microphone to Line

(200 - 4000) Hz  
< 3.6% @ line level of -10dBu

### TELEPHONE INTERFACE

#### On-Hook

- REN
- Metallic DC resistance T-R with 100 V d.c.
- Longitudinal DC resistance T+R to earth with 150 V d.c.

0.1  
> 10 MΩ  
> 10 MΩ

#### Off-Hook

- Termination impedance
- Line current limit setting
- Minimum line operating current
- Longitudinal balance
- Dialling

600 Ω @ 1800 Hz  
62 mA  
15 mA  
> 40 dB  
DTMF only

### CONFIGURATION

- Number of stored dial numbers
- Maximum length of dial number
- Programming dial numbers
- Changing options

up to 1000  
15 digits  
From a remote telephone via DTMF  
From a PC via RS-232  
From local keypad (VDL-44K only)

### CONNECTORS (mating connectors listed)

- Power input / Relay contacts
- RS-232 / External input
- Telephone line

1 x terminal block plug 8-way 3.81 mm pitch  
1 x terminal block plug 4-way 3.81 mm pitch  
1 x modular crimp plug RJ12, 6-way

### CABLING

- Telephone line
- Power input, relay contacts, external input

Min. 1 pair shielded external PVUT  
Fig-8 0.75mm<sup>2</sup>, multi-strand (100 m max)

### COMPLIANCE

- Telecommunications
- Safety
- EMC

ACIF S002:2001, S004:2001 (pending)  
AS/NZS 60950:2000 (pending)  
AS/NZS CISPR22:2002, class B (pending)