AFP
AUSTRALIAN FEDERAL POLICE

DOOR PHONE AF-5105

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Prepared By	P. Zeug
Reviewed By	R. Kells
Approved By	

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AFP DDOR PHONE AF-5105

DOOR / WALL INTEGRATED HANDS-FREE TELEPHONE

USER HANDBOOK

DESIGNED & MANUFACTURED BY

design2000

DESIGN TWO THOUSAND PTY LTD

www.design2000.com.au

gen@design2000.com.au

AUSTRALIAN OFFICE

Design 2000 Pty Ltd
9-11 Rose Street
Upper Ferntree Gully
Melbourne Victoria 3156
Australia

Sales/Service Contact:
📞 03 9758 5933
📠 03 9758 5560

N468

AFP DOOR PHONE AF-5105

INTEGRATED HANDS-FREE DOOR TELEPHONE

1. INTRODUCTION

The *AFP Door Phone*, with a line powered inbuilt telephone dialer and hands-free speaker phone, automatically connects people at unattended security points, doors or gates directly to Officers on their PABX extension, mobile phone, or any other telephone at manned stations.

This system is made for law enforcement agencies that are security conscious and wants things made simple and easy. The door unit is robust yet slim.

The *AFP Door Phone* means the end of '*no answer*' and allows members of the public and colleagues to make contact with push button ease.

The *AFP Door Phone* is ideally suited for all types of security and communication uses. Easy D.I.Y. installation instructions are provided for 'plug and play' operation.

Optionally, the *AFP Door Phone* has a transistor output to control an electric door strike/latch etc.. The *AFP Door Phone* can also be ordered with alarm inputs to report alarm events, and with more outputs to activate CCD cameras so that images can be captured on a personal computer.

Things that make this unit unique are its strength, slim style, performance and compatibility with any phone system analogue line. All electronic circuitry is safely integrated in the robust slim-line stainless steel & zincalume housing.

Pride has been taken in the making of this unit, with as much emphasis placed on the electronic design as there was with the superb appearance.

1.1   OVERVIEW

The *AFP Door Phone* Model AF-5105 looks and sounds similar to a conventional intercom plate. When you press the button at the front door, you hear dialing tones coming from the doorplate followed by telephone service tones, eg. ringing tone when the inbuilt telephone dialer is activated and a call is set up to your pre-programmed telephone number.

When you receive a call from your *Door Phone*, it is just like any other telephone call. To end the call, press *9 for instant disconnect or just hang up. It is that easy!

1.2   DESCRIPTION

The *AFP Door Phone* consists of an integrated stainless steel / zincalume housing:

1. The Front Door Plate

This is a vandal resistant stainless steel plate (1.6 mm thick). It contains the weather resistant push button, microphone and speaker.

2. Inside the Unit

It contains all the electronics, programmed data, auto-answer setting, and dialer. There are connectors for the front cover, the telephone line, optional switched transistor output for a door/gate latch and an optional dc power socket for when line power is insufficient. Optional sockets are available for another switched relay output, an external alarm input, and an optional RS232C serial port.

The unit is connected to any working telephone socket (pins 2 & 6 on a 610 socket or centre pins 3 & 4 on an RJ11/12 jack. RJ style plugs are provided.

The AF-5105 is telephone line powered so the unit continues to operate in the event of mains power failure.

1.3   FEATURES

- Hands-free Front Door Telephone
- Security appliance
- Telephone dialer
- Push button activated
- Intercom to your mobile phone, PABX extension, or any other telephone
- Brushed stainless steel finish (No. 4 finish, grade 316)
- Push Button LED
- Call Progress tones
- Speaker volume control
- Programmable PIN access
- Automatic disconnect
- Automatic push button redial (if the line is jammed up or busy, just press the button and you'll be re-connected!!!)
- Compatible with all analogue telephone lines or extensions
- Programmable telephone number
- Door Opener - relay output to operate electric door strike/latch to open doors or gates etc. (optional)
- Alarm input to automatically dial a number in the event of an alarm (optional)
- Easy D.I.Y. installation
- Two Year warranty
- ACMA Supplier's code N468

2. INSTALLATION

2.1 INSTALLATION BLOCK DIAGRAM
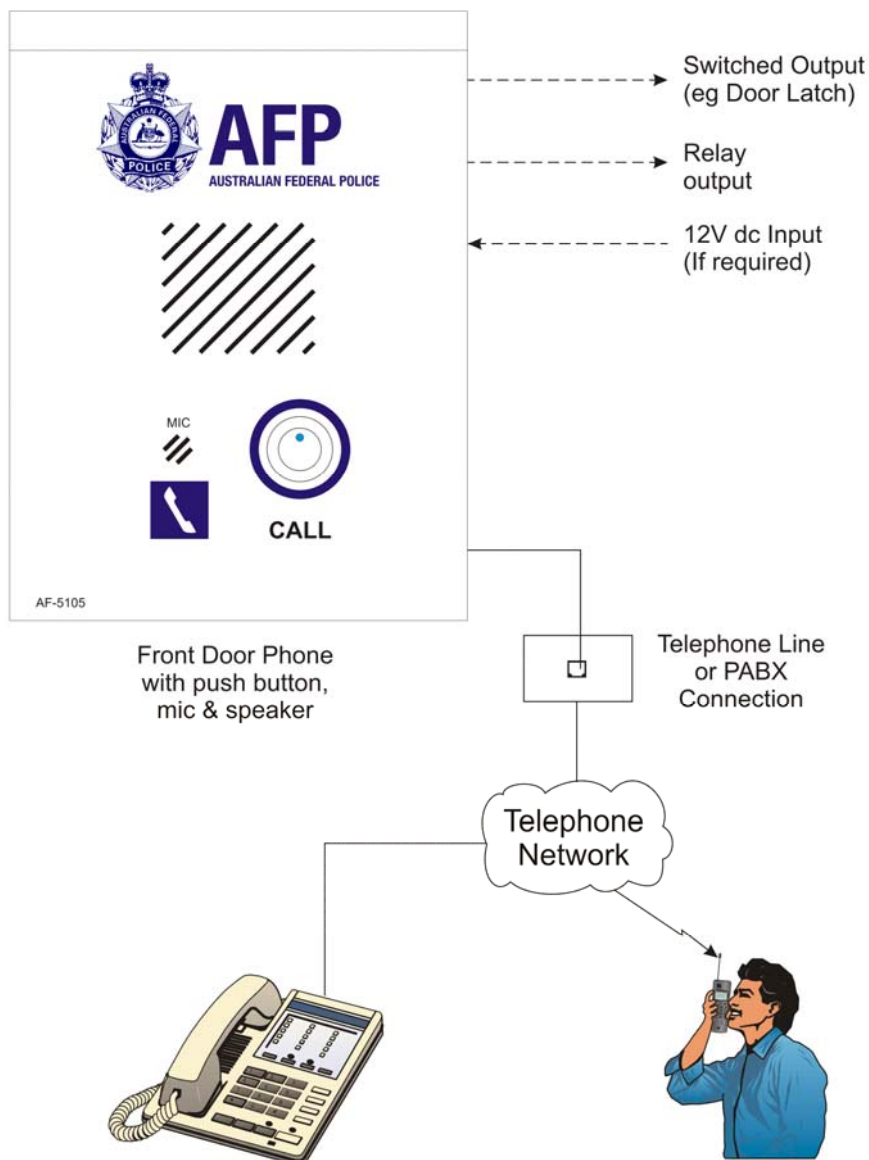
2.2 MOUNTING DETAIL

WALL MOUNTING
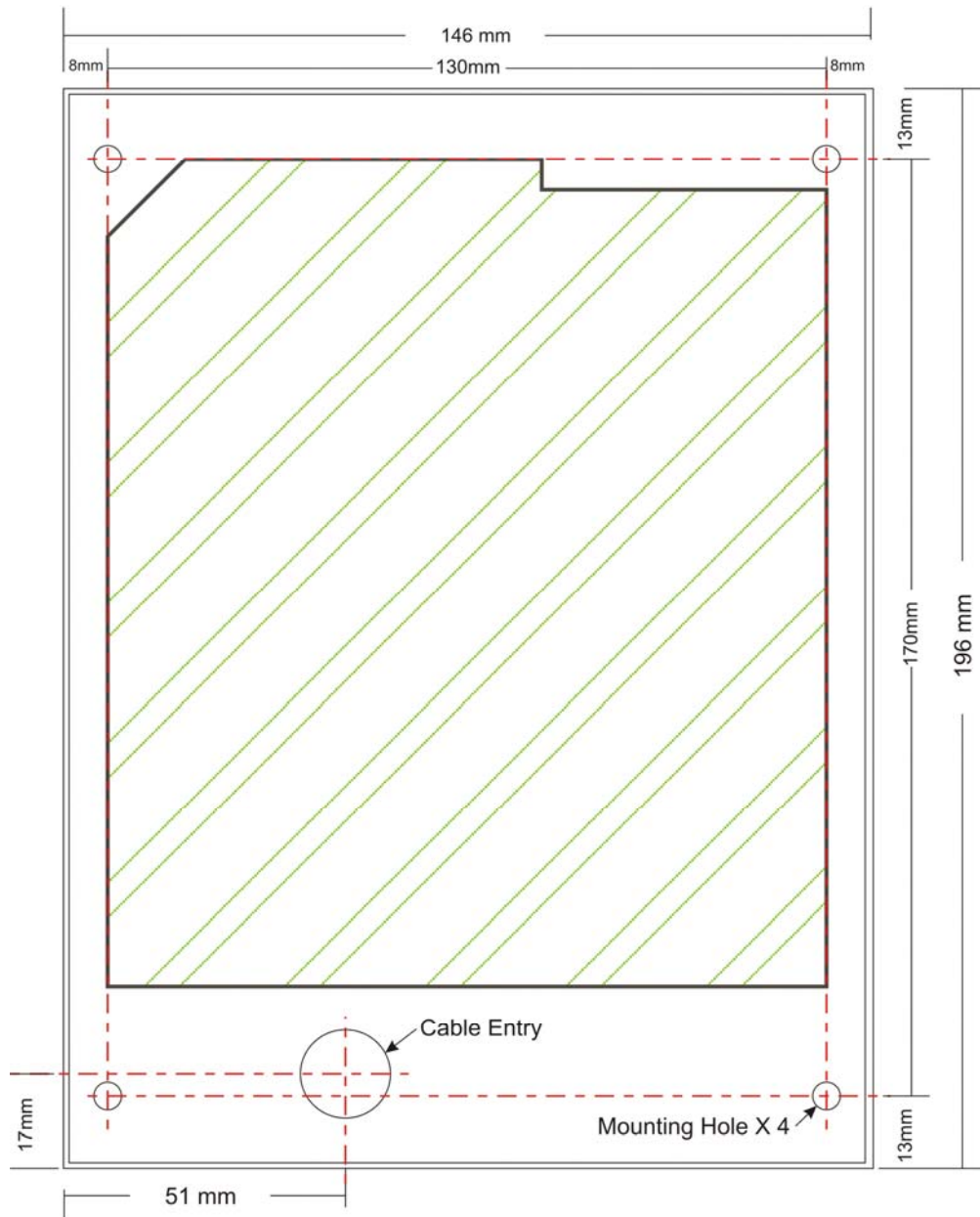
1 Remove cover by removing bottom grub screws.
2 Disconnect cover connector.
3 Drill holes for mounting screws as shown in diagram.
4 Drill hole (up to 16mm) for wiring as shown in diagram.
5 Screw base to wall taking care to protect PCB Assembly.
6 Pull wiring through and terminate.
7 Reconnect cover connector and fit cover.

Please Note: For security reasons, a TORX driver bit, no. T10, is required to undo & do up the cover grub screws at the base of the unit.

2.3   CONNECTIONS ON THE AF-5105

PL5
RELAY
CONNECTOR

1   NC
2   NO
3   COM

PL11
DOOR OPENER
CONNECTOR

1   DOOR +
2   DOOR -

POWER
12V DC
(IF FITTED)

PL14
POWER
CONNECTOR
12V DC

2 -VE   1 +VE

PL9
COVER
CONNECTOR

8   1

PL4
ALARM IN
(IF FITTED)

2   1

TEL. LINE

PL1

TELEPHONE
LINE
RJ12 PINS 3 & 4
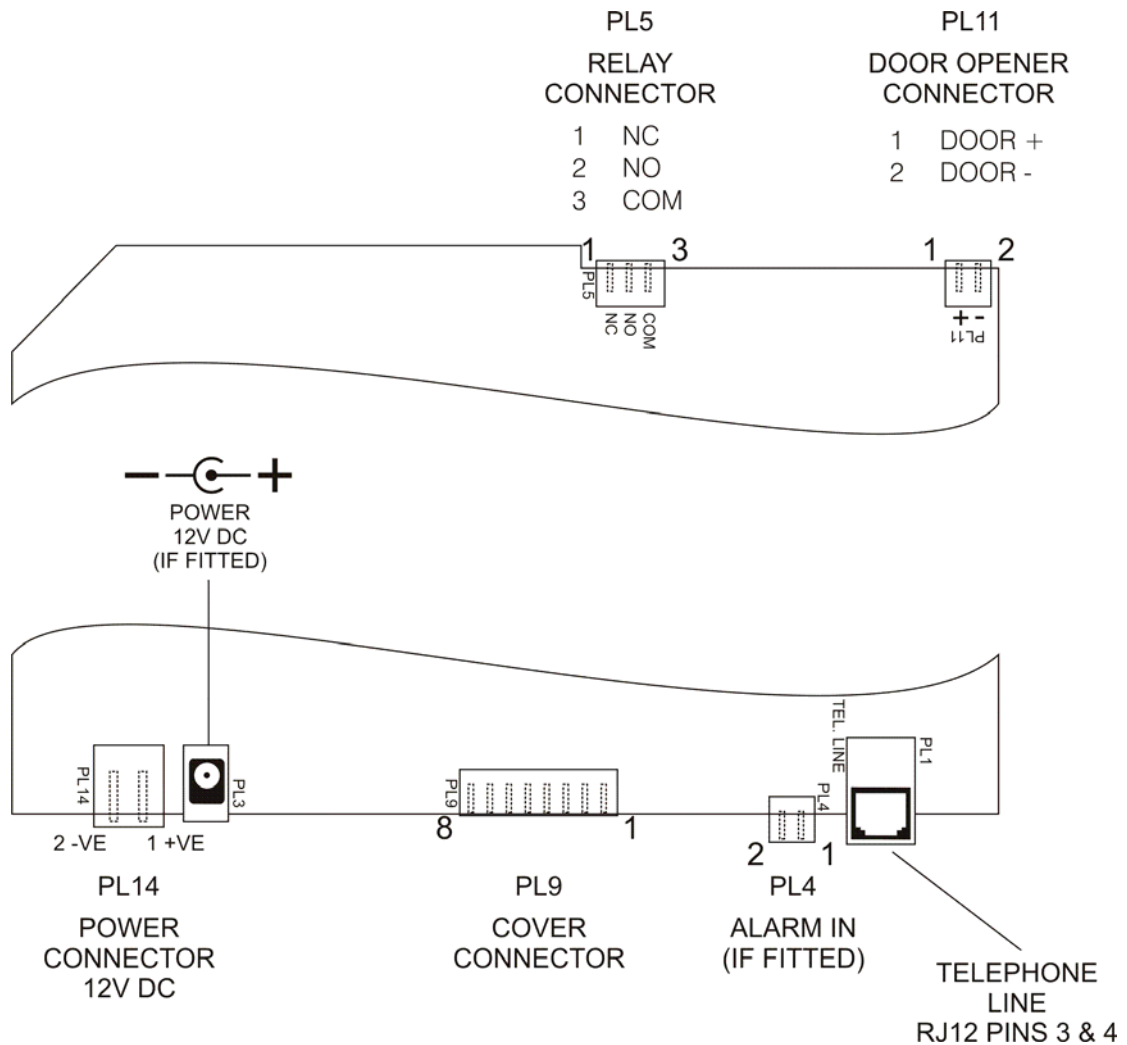
Please note: The relay, door opener, and alarm in connectors are optional

2.4 WIRING DIAGRAM FOR DOOR LATCH & SWITCHED OUTPUT MODE (OPT.)
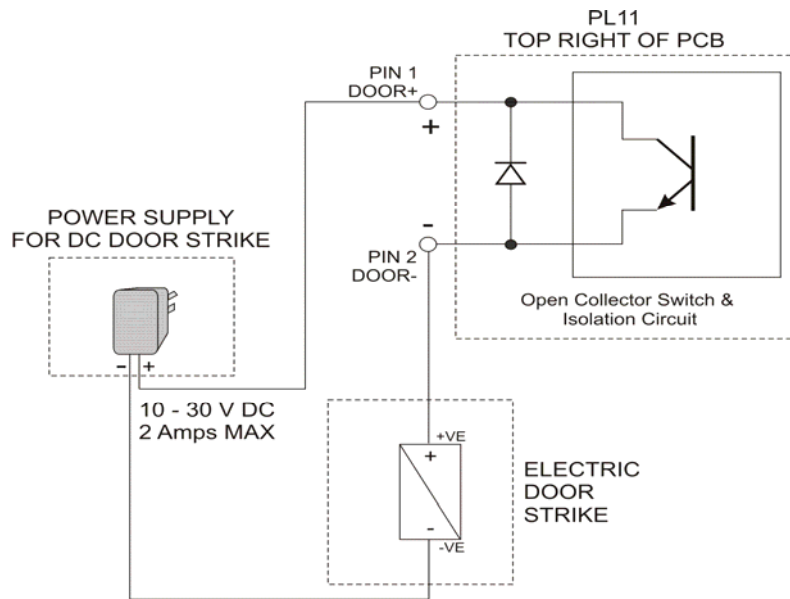

Switched Output Mode (Optional)

The 'door latch' switched output (open collector) and voltage free relay contact normally operate only when ***5 is pressed by the person receiving calls** from the *Door Phone* (please note that the voltage free relay contact requires external 12Vdc power – see note below about power supply). Optionally, the open collector and relay contact can also operate when the *Door Phone* push button is pressed and the line is seized on an outgoing call. This mode can be used to operate security cameras etc..

1. Dial up the Door Phone (set for auto answer) from an independent telephone
2. Wait for it to answer with a double 'pip' tone.
3. Press *, enter your PIN (normally none), then press 601.
4. Press 0 for both switched outputs to be activated only by DTMF *5, OR:
   Press 1 for both switched outputs to be activated when button is pressed and an outgoing call is in progress (DTMF *5 still works for activating the outputs on incoming calls), OR:
   Press 2 for the relay to be activated when button is pressed, and the transistor output (DOOR +, DOOR -) to be activated only by DTMF *5, OR:
5. Press 3 for both switched outputs to operate during an incoming call.
6. Press # to store the setting.

- Summary: <* [PIN] 601 [0, 1, 2, or 3] #>

2.5 PUSH BUTTON LIGHT

If a 12Vdc plug pack is connected to the unit, the Push Button light will illuminate permanently. The push button is then visible in dark locations.

Please note: Use only the factory recommended isolated dc power supply. Consult the factory if you intend using another power source.

3. USER INSTRUCTIONS

3.1   To Store the Telephone Number to be dialed

1. Set the 'AUTO-ANSWER' jumper in the unit to ON. (This is the factory default setting anyway).
2. Dial up the Door Phone from an independent telephone
3. Wait for it to answer with a double 'pip' tone.
3. Press *.
4. Enter your PIN (normally none).
5. Press 2.
6. Enter the required telephone number.
7. Press # to store the number.
Notes:
1. A dialing pause can be entered by pressing * #.
2. A star (*) can be entered by pressing * *.
3. A hash (#) can be entered by pressing # #.
4. If no number is entered, the AF-5105 will 'hotline' when the push button is pressed.

*   Summary: <* [PIN] 2 nnn…#>

3.2   How to make a call from the AFP Door Phone

1. Simply press the 'CALL' button for about half a second or more.
2. Listen for the dialing sound followed by ringing tone.
3. Talk as required.

Note: Pressing the push button during a call will re-establish the call. This is a fabulous feature designed to overcome the possibility of the system ever locking up the line.

3.3   How to call the AFP Door Phone

1. Set the 'AUTO-ANSWER' jumper in the unit to ON. (This is the factory default setting).
2. Dial up the Door Phone from an independent telephone and wait for it to answer with a double pip tone.
3. Talk as required.
4. Hang up when finished.

3.4   How to Open the Door (Optional)

1. While talking to the door phone party, simply press *
2. Enter your PIN (normally none).
3. Press 5 and listen for the confirmation tone.
*   The output relay will then stay activated for 10 seconds, allowing the calling party to enter.
*   Note that for your security this will only work from the remote telephone, the person standing outside cannot do it.

*   Summary: <* [PIN] 5 "beep">

3.5   How to Change the Speaker Volume

1. While talking to the door phone party, simply press *
2. Enter your PIN (normally none).
3. Press 3 to turn up the volume or 4 to turn down the volume, and listen for the confirmation tone.
*   Repeat steps 1 to 3 as required.

*   Summary: <* [PIN] 3 (up by 2dB) or 4 (down by 2dB)>

3.6   Force Disconnect

1. While talking to the door phone party, simply press *
2. Enter your PIN (normally none).
3. Press 9 and the caller will be instantly disconnected.

*   Summary: <* [PIN] 9>

3.7   Silence Disconnect (30 seconds default)

1. Set the 'AUTO-ANSWER' jumper in the unit to ON. (This is the factory default setting anyway).
2. Dial up the Door Phone from an independent telephone
3. Wait for it to answer with a double 'pip' tone.
4. Press *.
5. Enter your PIN (normally none).
6. Press 8.
7. Enter the maximum number of seconds of silence detection on the line side for a door phone call to be automatically disconnected (0 = no silence disconnect or 1 → 255 seconds). Eg. if you enter 30 seconds, any call with a silence period (on the line side) of thirty seconds or more will be automatically disconnected.
8. Press # to store the setting.

*   Summary: <* [PIN] 8 s…#>

3.8   Total Call Time Limit (10 minutes default)

1. Set the 'AUTO-ANSWER' jumper in the unit to ON. (This is the factory default setting anyway).
2. Dial up the Door Phone from an independent telephone
3. Wait for it to answer with a double 'pip' tone.
4. Press *.
5. Enter your PIN (normally none).
6. Press 7.
7. Enter the maximum number of minutes that a door phone call is allowed to go for before the call is automatically disconnected (1 → 120 minutes). Eg. if you enter 5 minutes, all calls are limited to five minutes in duration (or less if the other party hangs up sooner than the five minute mark).
8. Press # to store the setting.

*   Summary: <* [PIN] 7 m…#>

3.9 How to Change Your PIN

1. Set the 'AUTO-ANSWER' jumper in the unit to ON. (This is the factory default setting).
2. Dial up the Door Phone from an independent telephone and wait for it to answer with a pip tone.
3. Press *
4. Enter the current PIN (normally none).
5. Press 1.
6. Enter the new PIN (four digits, **or no digits if no PIN is required**)
7. Press # to store the new PIN number, and a confirmation tone is heard.

- Summary <* [PIN] 1 pppp...#>

3.10 Automatic Disconnect

The AF-5105 will disconnect the telephone line if:

- Four busy tones are detected.
- DTMF *9 is detected.
- Loop current loss or line reversal is detected
- The push button is pressed and a new call is automatically established.
- 30 seconds of silence on the line side is detected.
- Total call time limit of 10 minutes has elapsed.

3.11 Dial (Long) Tone Disconnect

Some telephone systems provide dial tone or long tones as the disconnect signal. The AF-5105 may be programmed to disconnect after 1 second to 255 seconds of continuous tone (two seconds minimum is recommended).

- Summary <* [PIN] 603 t...#>, where t = 1 $\rightarrow$ 255 (or 0 = off) seconds. (ie. enter a value of the seconds required or enter 0 to turn this feature off).

3.12 Door Latch/Relay Output Closure Timer (Optional)

The door latch and voltage free relay output normally stay closed (or open) for ten seconds when activated by the person receiving a door phone call. The closure (or open) timer can be adjusted from 1 second to 255 seconds.

- Summary <* [PIN] 602 t...#>, where t = 1 $\rightarrow$ 255 seconds (ie. enter a value of the seconds).

3.13 Master Reset

You can reset all user programmed information back to the factory default condition.

Press *699# after answer. ***Take care not to unintentionally enter this command!!!***

4.   SPECIFICATIONS

Enclosures	Stainless steel (Grade 316) and powder coated zincalume
Dimensions	200 mm x 150 mm x 25 mm.
Power Requirement	Telephone line powered.
Power Consumption	3 mA in stand-by mode.
	20 mA during dialing and conversation.
Operating Temperature Range	-10 → +50 ° C.
Storage Temperature Range	-20 → 80 ° C ambient.
Humidity, Storage and Operating	To 98% non condensing.
Mean Time Between Failure	> 20 years.
Hands free Speakerphone	Motorola MC33218AP semi duplex.
Output level	-13.5 → 0 dBm adjustable.
Frequency range	300 Hz → 3.4 kHz.
Line Interface	Two wire analogue ring in loop out.
Programming method	DTMF
Push Button (Door plate)	Weather resistant tactile
Speaker	Weather resistant mylar cone 32 Ohm 0.5W.
Vandal resistance	Stainless steel mesh, 4 x anti-tamper screws.
Displays	Off hook dialer LED, Tone detect LED.
ACMA Supplier's Code Number	N468.
Warranty	Two years.

Note: Specifications are subject to change without notice.

N468

AFP
DOOR PHONE

AF-5105

HANDS-FREE DOOR TELEPHONE

"Simply for the security conscious"

MADE IN AUSTRALIA BY

design2000

Est. 1968

TELEPHONE: (03) 9758 5933
FAX: (03) 9758 5560
E-MAIL: gen@design2000.com.au
WEB SITE: www.design2000.com.au

5.   PACKING LIST

AFP DOOR PHONE   AF-5105

Quantity	Item	Use
1	Front door plate assembly	Grille, speaker, mic, push button, electronics and connections etc.
4	Rubber feet	For base of wall unit
1	RJ12 to RJ12 telephone lead	Connection to phone line
1	BL-4 screw terminal (optional)	dc door strike (optional)
4	Wall plug (drill size 3/16″ (5 mm))	Masonry applications
4	7g x 25 mm cross-recess pan head screw	Wall mounting
1	This manual - Document G/01141C	How to use this Door Phone

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TELEPHONE: (03) 9758 5933	FACSIMILE: (03) 9758 5560
E-MAIL: gen@design2000.com.au	WEB SITE: www.design2000.com.au

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design2000.com.au