

ANALOG PANPHONE SERIES 4 CONFIGURATION MANUAL



1. NOTICE

This document refers to the PANPHONE devices with Analog telephony interface.

Additional copies of this manual may be obtained from Manufacturer. Reproduction of this manual or parts thereof without written permission from Manufacturer is strictly prohibited.

Manufacturer reserves the right to modify the hardware and software described herein without prior notice. However, changes made to the hardware or software described do not necessarily render this publication invalid.



2. DECLARATION OF CONFORMITY

Manufacturer hereby declares that the PANPHONE products models complies with the essential requirements specified in the directive 1999/05/EC on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity

3. CONTENT

1. <u>NOTICE</u>	<u>2</u>
2. <u>DECLARATION OF CONFORMITY</u>	<u>2</u>
3. <u>CONTENT</u>	<u>3</u>
4. <u>INTRODUCTION</u>	<u>4</u>
5. <u>ATTENTION</u>	<u>4</u>
6. <u>FEATURES</u>	<u>5</u>
8. <u>OPERATION</u>	<u>6</u>
9. <u>INSTALLATION</u>	<u>8</u>
9.1. <u>SAFETY INSTRUCTIONS</u>	<u>8</u>
9.2. <u>CONNECTIONS:</u>	<u>9</u>
9.3. <u>CONNECTORS AND ITS FUNCTION:</u>	<u>10</u>
10. <u>PROGRAMMING</u>	<u>14</u>
10.1. <u>START PROGRAMMING</u>	<u>14</u>
11. <u>DIGITS TABLE</u>	<u>18</u>

4. INTRODUCTION

Welcome to the user's network of **PANPHONE Door Phone products**.

The product you purchased contains the most modern technology, which has many applications:

- Emergency Phone
- Telephone exposed to the public (no risk of theft)
- Electric Door Phone for PBX (Connect to an extension)
- Intercom for Elevators or other places which need communication
- Intercom in industrial plants
- Hospital room communicator

This product is part of a range of communication systems of PANPHONE for home, offices, multifamily systems for buildings and gated communities.

5. ATTENTION

Read this manual carefully before installing and using this product in order to ensure you get the most benefit from it.

Keep this manual in a safe place for future reference.

PANPHONE thanks you for purchasing this product, and invites you to contact us with any questions, suggestions or concerns regarding our other products.

6. FEATURES

- **Intelligent handsfree**

The PANPHONE is an intelligent handsfree telephone that connects to a telephone line, or a telephone PBX extension

- **2 free voltage contact relays:**

It has two relay contacts to open a door or other applications (turn on/off lights, heating, etc).

NOTE: Current firmware version, deals with only one relay contact.

- **Buttons and/or numeric keypad:**

It is connected to a panel with 1 to 2 individual buttons and/or numeric keypad, depending on the model. These buttons are used like buttons on a phone memory or telephone keypad.

- **Agenda dialing:**

Programmed numbers are dialed when button 1-2 or keys of the keypad are pushed.

- **Free dialing:**

Alternatively, on the keypad model, the numbers can be dialed freely. User dials the phone number as he would do on any phone, (without lifting a handset, or pressing the speaker key or handsfree key)

- **Open-door command for access control feature (Keypad model):**

If the user dials the * (asterisk) key followed by a 4 digits, the doorphone will activate the relay during the programmed time.

8. OPERATION

Making calls

NOTE: You can enable the Panphone to dial a telephone number, only if it detects dial tone (see programming).

Making one-touch calls

- Press a button (or key of telephone keypad)
- The Panphone will automatically pick up and dial the number programmed to that button.
- Speak normally

Making calls by dialling the destination number

(Only with telephone keypad panel)

NOTE: This mode is automatic, when there are no programmed numbers associated with the keys

- Dial the keys of the number to call
- The Panphone will automatically, pick up and start to dial the number that you dialed
- Continue dialing the complete number
- Speak normally

Receive calls

- The Panphone can operate in 2 different ways when receiving calls:
- **Auto Attendant**
Answers the phone automatically when it receives an incoming call (factory programming)

- **Manual Attendant**

The Panphone will wait the user to presses the # key.

Meanwhile, it will emit a ringing sound through the speaker

Ending calls

The Panphone will end a call for 4 reasons:

- Local user presses the * key (asterisk)
- Remote user presses, the # key
- Time Out: the maximum talk time expires (see programming)
- The PBX clears down (B Party hangs up) Busy tone is detected (see programming)

Gating (relay activation)

There are two modes of relay activation:

- **Timed relay**

The operator dials **8** to activate the relay 1 for specified time (See programming).

After that period, the relay releases automatically.

The operator can dial **5** to activate the relay 2 for specified time. After that period, the relay 2 releases automatically.

- **Manual Relay**

The remote operator dials **8** to activate the relay 1.

The remote operator dials **5** to activate the relay 2.

The remote operator dials **6** to turns off the relay 1.

The remote operator dials **4** to turns off the relay 2

NOTE: This mode requires external power.

9. INSTALLATION

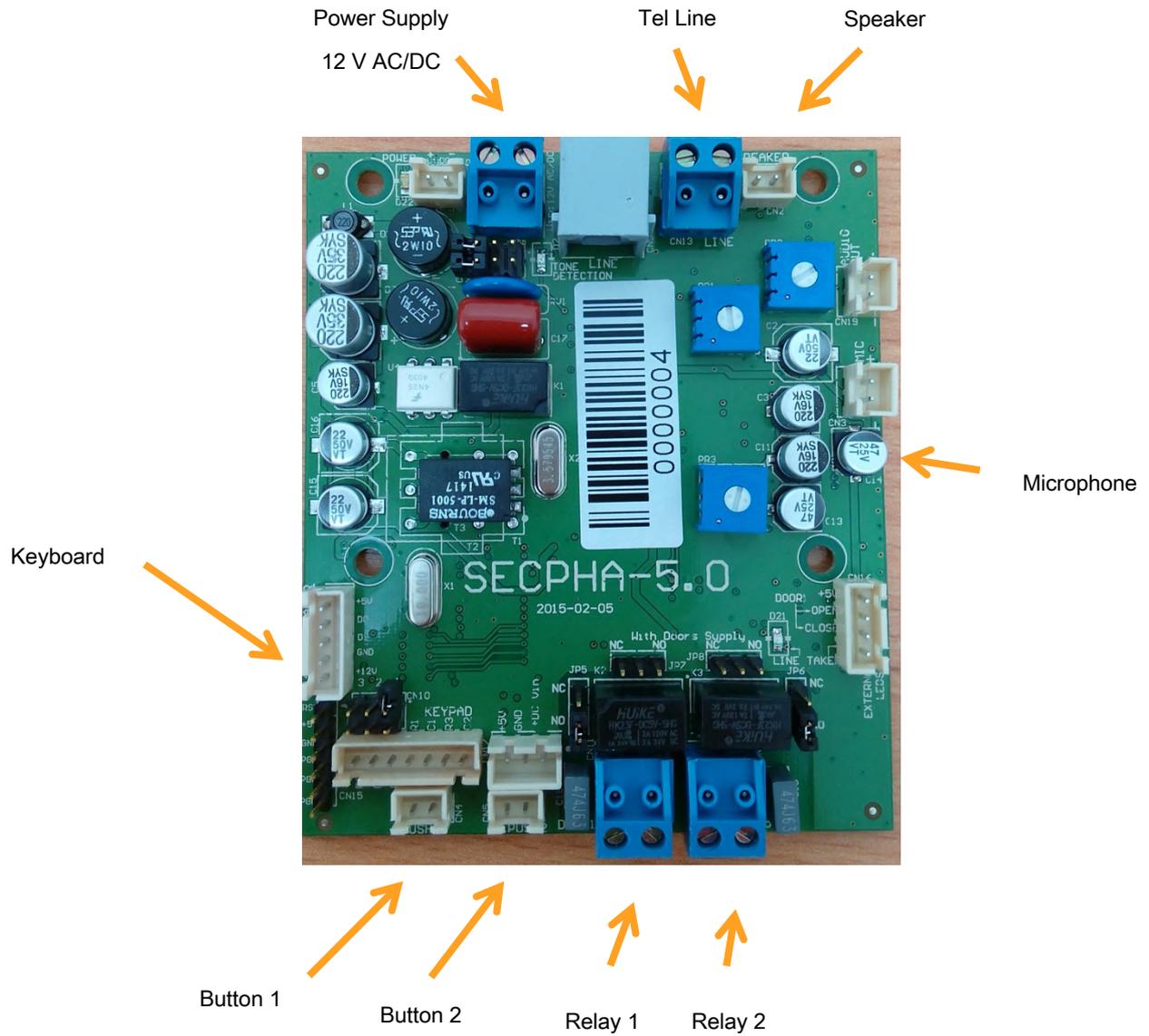
9.1. Safety Instructions

- Read and understand all the instructions.
- Do not use this product near a direct heat or humidity source.
- Do not put any foreign objects within the product's enclosure.
- Do not try to repair it (call the authorized service).
- Do not install this product or make contact with connection points during a thunderstorm.

Connection points and settings

Identify the connection points and settings, according to the picture.

9.2. Connections:



9.3. Connectors and its function:

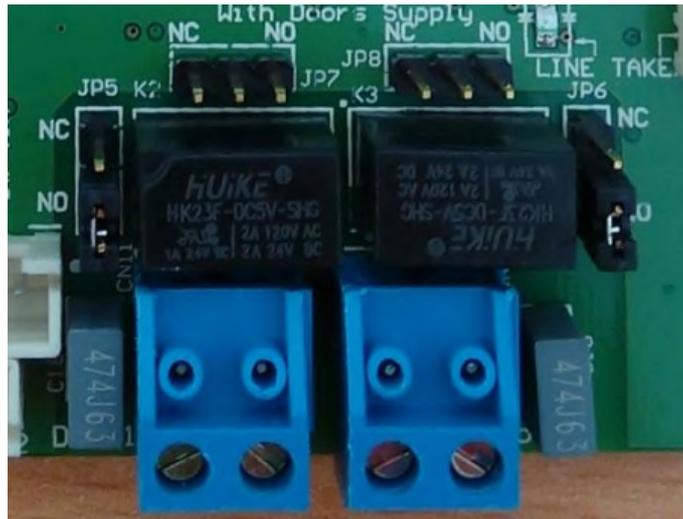
Connector name	Meaning
RELAY 1	Door Relay 1
RELAY 2	Door Relay 2
TEL LINE	Tel line or PBX extension
KEYPAD	Telephone Keypad
BUTTON 1	Button 1
BUTTON 2	Button 2
MICROPHONE	Microphone
SPEAKER	Speaker
Power Supply	Power Supply 12 V AC/DC

Jumpers near of the relays

In the following picture, you can see the jumpers JP5 and JP6. With these jumpers you can set the state of each relay when it is activated.

NO means Normally Open, so the relay pins are joint during the relay activation, and separated the rest of the time.

NC means Normally Closed, so the relay pins are separated during the relay activation, and joint the rest of the time.

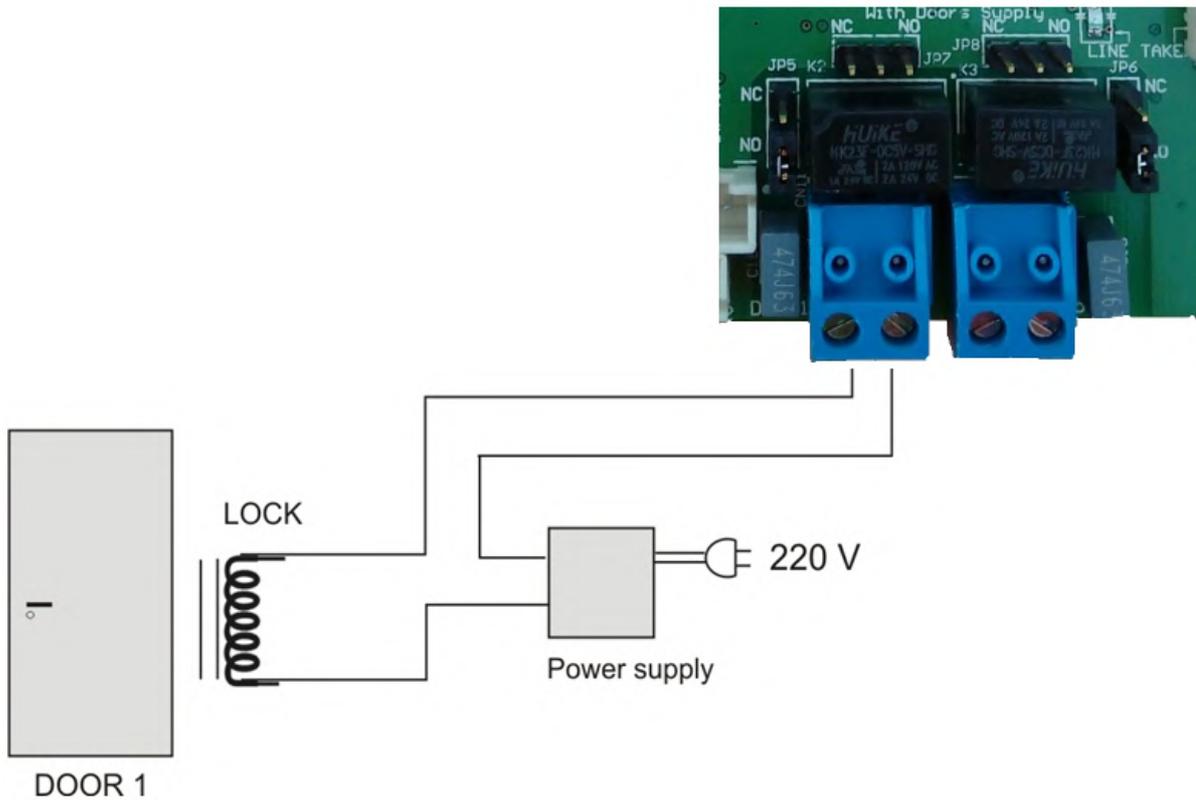


Line or telephone extension wiring

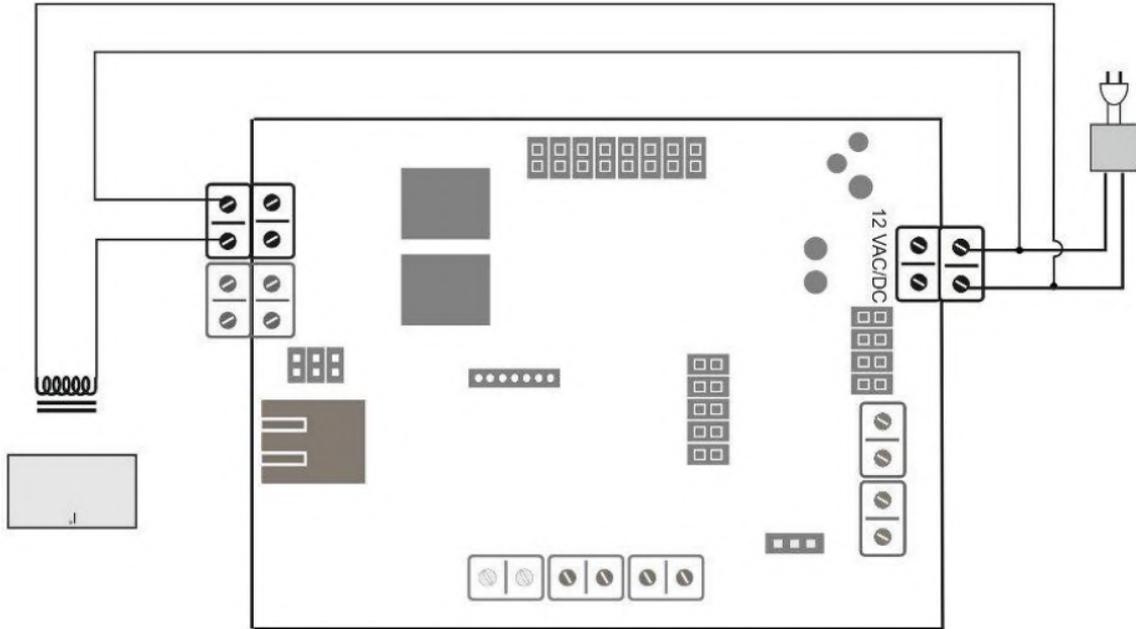
Connect the line (or extension interface of a PBX) to the terminal board connector **LINE** or to the **RJ11** connector.

Installation of door lock

- Be sure to purchase the correct release door lock type and set **JP5** accordingly.
- Connect a wire of the door lock to one terminal of the “DOOR 1” connector
- Connect the other wire of door lock to power supply
- Close the circuit from power supply to one terminal of the “DOOR 1” connector

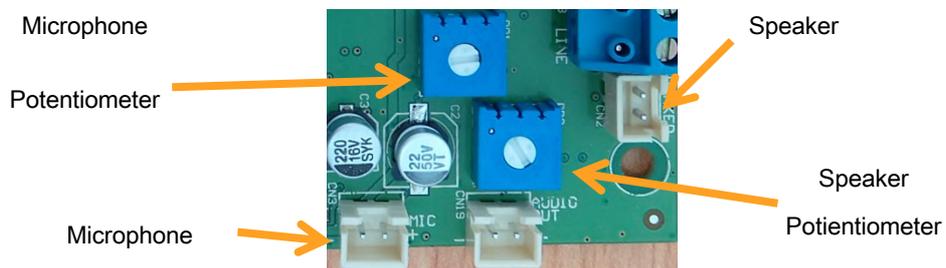


Other configuration is possible as you can see in the following picture. In this case, the same power supply is used, for both, electronic board and door lock:



Adjustment

- Turn down the volume of microphone to the minimum using the MIC pre-set.
- Make a call.
- Talk normally and adjust the speaker volume to the desired level, using the SPK pre-set (increase level anti-clockwise).
- Now, adjust the microphone volume to the desired level, using the MIC pre-set (increase level clockwise).



Busy Tone Detection

When the Panphone is required to detect busy tone for hanging up, it is important that the busy tone features (symmetry and cadence) are set to match the PBX or PSTN busy tone.

Normally tone level and frequency is not a problem for detection (-38 dB sensitivity and wide range, from 315 to 640 Hz) but symmetry of duty cycle and cadence are important variables.

NOTE: If the range of tone detection is too wide, it could happen that some visitor voice is confused with busy tone, and the Panphone ends call prematurely.

10. PROGRAMMING

10.1. Start programming

- Call to the Panphone doorphone from another telephone and wait for the doorphone to answer.
- When you can talk, dial * 90 and verify that the Panphone beeps three acceptance tones

If you do not hear the beeps or it issues a strong noise, it may be necessary to decrease input or output volume (See Adjustment)

Programming Commands (FDPV = Factory Default Programmed Value)

Command name	Command	Observations
<i>Receiving Calls</i>		
Dial by tones	* 26 0	FDPV
Dial without dial tone detection	* 24 1	FDPV
Dial with dial tone detection	* 24 0	
Audio open while dialing	* 33 0	FDPV
Audio muted while dialing	* 33 1	
Call Destinations: Panel with 1 to 2 Buttons		
Agenda in Button 1	* 4 0 YYY #	YYY: Number of up to 10 digits (see Digits Table)
Agenda in Button 2	* 4 1 YYY #	
<i>Call Destinations: Panel with Telephone Keypad</i>		
Agenda in button	* 1 X YYY #	X: Key of Telephone Keypad 0 to 9 YYY: Number of up to 10 digits (see Digits Table)
Erased of Agenda (when free dial is needed)	* 1 X #	X: Key of telephone Keypad 0 to 9
<i>Making calls</i>		
Time to answer	* 31 Time To Ans	Time to Ans: 0: 0 segs FDPV 1: 5 segs 2: 10 segs ... 9: 45 segs
<i>Ending Calls</i>		
Maximum Call Time (duration of communication)	* 25 Time Call	Time Call: 1: 1 minute FDPV

Command name	Command	Observations
		2: 2 minutes 2: 3 minutes ... 9: 10 minutes
<i>Busy Tone detection</i>		
Duty cycle symmetry percentage Perfect 0123456012345601234560123456 + +-----+ +-----+ Toff Ton +-----+ +-----+ +-----+ Not perfect + +----+ +----+ Toff Ton +-----+ +-----+ +----+	* 34 Sym %	Sym %: 0: 1% Toff=50% = Ton=50% 1: 2% 2: 3% ... 9: 10% FDPV 0: 1% is perfect or almost perfect 9: 10% maximum tolerance Generally 50% duty cycle is the rule but delay in detecting can alter this
Minimum Cadence	* 35 m	m = 2 FDPV
Maximum Cadence	* 36 M	M = 6 FDPV
<p>Call to someone, tell him to hang up, listening busy tone (tooot...tooot...) count how many toots you hear in 5 seconds. Divide that amount A in 2.</p> <p>Set $m = A/2 - 1$ and $M = A/2 + 1$. To wider range: $m = A/2 - 2$ and $M = A/2 + 2$</p> <p>Example: if you listen 9 toots, $9 / 2 = 4.5$, set $m=3$ and $M=6$.</p> <p>If you have false hangs up, increase m and/or decrease M</p>		
<i>Relay Activation through panel dialing password (in panel with Telephone Keypad)</i>		
Password to activate relay	* 1 * CCC #	CCC: password 1 to 10 digits
No dialing password relay activation	* 1 * #	FDPV

Command name	Command	Observations
<i>Relay Activation through DTMF dialing command (from telephone with is in current call)</i>		
Manually mode (command to open / command to close)	* 28 1	8: activates relay 1 5: activates relay 2 6: deactivates relay 1 4: deactivates relay 8
Temporary mode (command to open / timeout to close)	* 28 0	8: activates relay 1 5: activates relay 2 timeout: deactivates relay FDPV
Temporary mode time programming	* 20 Relay Time	Relay Time: 0: 0.5 segs 1: 1.0 seg 2: 1.5 seg ... 6: 3.5 seg FDPV ... 9: 5.0 seg
<i>Reset factory default settings</i>		
<i>Restore Factory settings</i>	* 91	

11. DIGITS TABLE

To make the SecPh dial:	Program
0 to 9	0 to 9
* (star)	**
# (hash)	* #
Pause (800 m/secs)	* 0
FLASH (500 msec) + Pause (800 msec)	* 1

Example: The Panphone is connected to a PBX extension and it is required that when the user presses Button 1 the Panphone call the emergency number 911, program:

- * 9 0 to enter programming mode
- * 4 0 9 1 1 #, where:
 - 9 1 1 is the emergency number
 - # closes the programming command