# **DoorPhone VoIP**

Slim IPDP – 01 Slim IPDP – 02 Slim IPDP – 01C Slim IPDP – 02C Slim IPDP – 01C antivandal



Installation and Operating Instructions

## Welcome

<u>We congratulate you</u> on purchase of "**Slim IP Door phone -VoIP**" (VoIP = Voice over IP). This VoIP DoorPhone provides you by many features which allows you easy communicate with visitors of company, family houses, schools, etc.. You can easily connect it to an Ethernet network or VoIP exchange or directly to SIP server through internet conection.

The basic models of VoIP DoorPhone are *Slim IPDP-01* (supply with 1 button), *Slim IPDP-02* (supply with 2 buttons), *Slim IPDP-01C* (supply with 1 button and camera), *Slim IPDP-02C* (supply with 2 buttons and camera) and *Slim IPDP-01C antivandal* (supply in stainless steel casing with 1 button and camera).

The VoIP Doorphone powering is either by AC/DC power supply 12V or by PoE (Power over Ethernet) technology. No additional cabling for power is therefore necessary.

The VoIP Door phone configuration is over an integrated web server, which can be controlled from any web browser, e.g., IE, Mozilla Firefox.

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## **1** Basic Description

#### 1.1 Features

- Two 25digit numbers (IP adresses) under each button (includes \*, #)
- DAY/NIGHT switching automatically or manually
- Possibility to dial \* or # to prolong the communication
- Possibility to connect 2 independent locks (magnetic, electrical) for door opening
- 5 different modes of 2 integrated relays (for example: lighting, delayed opening, etc..)
- > 2 codes for door phone hanging up by phone
- 2 codes for relay activation by phone (door opening)
- 6 code locks (password from buttons at the door)
- Adjustable number of rings before incoming call is pick up
- Adjustable time between button press during code dialling
- Adjustable time of hanging up before REDIAL
- Adjustable time before start dialling
- Power supply 12V AC/DC, 500mA max or PoE technology
- Integrated heating of printed circuit
- Permanent lighting through visiting cards
- White LEDs for automatic ligting for camera
- Integrated full color camera
- Ethernet 10/100Mb with standard 10BaseT a 100BaseTx
- Web server for remote configuration BOA
- Operating system Linux 2.6
- USB for connection internal camera USB guest 1.1, software GSPCA software for video transmission to the browsers in PC – W3CAM(J-PEG, RTSP Streem) and stream H.263
- > SIP connection P2P or PBX network system
- ➢ WEB − firmware upgradeable
- > WEB interface for control and setup parameters
- Web server pro dálkové programování BOA

## 1.2 Terminology

- Ethernet is a family of frame-based computer networking technologies for local area networks (LANs).
- A local area network (LAN) is a computer network covering a small physical area, like a home, office, or small group of buildings, such as a school, or an airport
- **10BASE-T** runs over four wires (two twisted pairs) on a Category 3 or Category 5 cable.
- 100BASE-TX Uses two pairs, but requires Category 5 cable (FastEthernet)
- **Twisted pair** cabling is a form of wiring in which two conductors (the forward and return conductors of a single circuit) are twisted together for the purposes of canceling out electromagnetic interference (EMI) from external sources.
- UTP (unshielded twisted pair) cable is not surrounded by any shielding.
- **STP** (shielded twisted pair) cables are often shielded in attempt to prevent electromagnetic interference.
- The World Wide Web (commonly abbreviated as the "Web") is a system of interlinked hypertext documents accessed via the Internet.
- **Hypertext Transfer Protocol (HTTP)** is an application-level protocol for distributed, collaborative, hypermedia information systems.
- Universal Serial Bus (USB) is a serial bus standard to connect devices to a host computer.
- A video codec is a device or software that enables video compression and/or decompression for digital video. H.264 is a standard for video compression, and is equivalent to MPEG-4 AVC. H.263 is a video codec standard originally designed as a low-bitrate compressed format for videoconferencing. MPEG-4 is collection of methods defining compression of audio and visual (AV) digital data.
- JPEG is a commonly used method of compression for photographic images.
- Voice over Internet Protocol (VoIP) is a general term for a family of transmission technologies for delivery of voice communications over IP networks such as the Internet.
- The Internet Protocol Suite (commonly known as TCP/IP) is the set of communications protocols used for the Internet
- An Internet Protocol (IP) address is a numerical identification and logical address that is assigned to devices participating in a computer network utilizing the Internet Protocol for communication between its nodes.
- **Dynamic Host Configuration Protocol** (**DHCP**) is a network application protocol used by devices (*DHCP clients*) to obtain configuration information for operation in an Internet Protocol network.
- The **Internet** is a global system of interconnected computer networks that use the standardized Internet Protocol Suite (TCP/IP).
- An **intranet** is a private computer network that uses Internet technologies
- **Power over Ethernet** or **PoE** technology describes a system to transfer electrical power, along with data, to remote devices over standard twisted-pair cable in an Ethernet network

**Network Time Protocol (NTP)**, a means of synchronizing clocks over a computer network.

## 1.3 Module Assembly

The Slim IPDP is supply in two basic models with color camera Slim IPDP-01/02C or without camera Slim IPDP-01/02. Antivandal version Slim IP01C Antivandal is made from stainless steel and it is designed as antivandalism solution.











Slim IPDP-01

Slim IPDP-02

Slim IPDP-01C

Slim IPDP-02C

Slim IPDP-01C antivandal

## 1.4 Module Features

#### 1.4.1 Slim IPDP Basic Module

The Slim IPDP basic module includes IP module, PoE mudul, camera module and motherboard. Schematics of each components is shown on picture 1 (page 8).

We recommend use for powering of Slim IP DP the PoE technology or AC voltage min.11Vst - max.15Vst eventually DC voltage min.12Vss - max.18Vss. This voltage you connect to screws "**12V**". Consumption of Slim IPDP is max.300mA. This power supply is used also for powering of el.locks. You have to consider consumption of el.locks . In practise is mostly recommended power supply AC/DC 12V/1A  $\div$  2A.

The Slim IPDP includes circuit for powering via UTP cable – PoE (Power over Ethernet). When you use IP Switch with PoE or you use PoE power (small box inserted into UTP cable connection) then you don't need 12V for door phone operation. When is used el.lock for door opening and you want to be powered by PoE then you must use low consumption lock (12V/350mA max). Then for lock powering you use screw on card ( card lighting) ( picture 4 at page 10). When you use normal lock then you must use 12V power supply ( in circuit with relay - contact).



Picture 1 Basic module - motherboard

The relay connection is shown on pict. 2.(page 9) The "**NO**" designation means an idle-disconnected contact, "**COM**" means a pin contact (middle) and "**NC**" means an idle-connected contact. The contacts of both relays are galvanically isolated each other and from other circuits as well. The variants of relay connection are shown on picture. 3 and 4.( page 10)







Picture 3 Examples of relays connection



Picture 4 Examples of relays connection powered by PoE

#### ATTENTION - lock is must be low power consumption, max 350mA.

Setting voice communication -

trimmer position is done by manufacturer major and in installations it meets volume inquiry. Therefore changes of trimmer setting please do in necessary cases only. Basic position of trimmers, sense of rotation and meaning trimmers are illustration on picture 5. (page 11). The changes you can make up your needs. The sense of turning is that turning to right value is increasing. Behaviour of



#### Picture 5 Setting of trimmers

IPDP is like handsfree phone – during communication signal from speaker is returning to microphone and it is coming to caller delayed (caused by digital processing and signal transmission). From this reason IPDP is equipped by circuit for echo cancelation and its setting must be done carefully. Setting of level means during which sound level is switch off microphone in IPDP to not return delayed sound back. Sense of trimmers is at picture 5 (page 11)..

The trimmer of light sensor set sensitivity for surrounding light level during which is activated white LEDs lighting for camera. The LEDs lighting is activated during communication only.

**DIP switch** – setting of default values and mode of Slim IPDP via DIP switch – picture 6 (page 11).

1-reserve (back up)

1-reserve (back up)

2- mode P2P (peer to peer) / SIP server

- 3- factory setting (default) erase all programmed parametres to default values except memory numbers
- 4- default IP adress setting 192.168.1.250

All changes are executed after switch OFF / ON (restart).

After start of VoIP modul the DIP switch 3 and 4 must be switch into position "on" otherwise new settings or new IP adress will be rewrite again to default values.



#### Picture 6: DIP switch setting

## 1.5 Installation of DoorPhone VoIP Assembly 1.5.1 Open and close the cover of Slim IPDP



#### 1.5.2 Dismounting lighting of nameplate



#### 1.5.3 Assembly Slim IPDP on the wall

The installation is made by screwing to the wall by means of dowels.



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1.5.4 Return lighting name plate after mounting on the wall.



1.5.5 Change of nameplates



Each button has its separate nameplate hold by means of plastic flag (see figure). The paper nameplates can be printed from Excel form (to be downloaded at <u>www.alphatechtechnlogies.cz</u>.

#### 2.1 Signaling Overview

The IPDP is signalling acoustically stages during its operation which can happen. Further signalling is by red LED (placed under microphone hole).

Condition	Tones	Tone frequency	LED
Line OFF HOOK		425-850-1275	Lighting
Line ON HOOK		1275-850-425	Light off
Report after calling	╶ <u>┲</u> ╌┛╌	425-850-1275	Lighting
Notification about call ending	-8-8-8-	1275	Lighting
Phone command confirmation		425	
AB line connection (Reset)	-8-8-	1275-850-1275	Flash
Error (generaly anything incorrect)	-8-8-8-8-8-8-	425	
Empty memory (no progr. numb.)	<b></b>	850-1275-1700	
Communication is establishing	-	-	Flashing
Communication is running	-	-	lighting

## 2.2 Visitor at Door

Behaviour of IPDP is done by preprogrammed parametres.

**The IPDP buttons are** equipped by cards with names or positions of people inside building. The visitor presses appropriate button – IPDP makes line OFF HOOK either immediatelly (pressed button is not first in code for el.lock from buttons) or delayed (time between button press) – dial saved number under this button. Dialled number is different up dial mode in IPDP which is preprogrammed:

- mode **DAY/NIGHT** = when IPDP is in DAY mode then dial always number saved in *1 column.*, When is in NIGHT mode then dial always number saved in *2 column*.
- Switching DAY/NIGHT mode is possible either automatically or manually. It is adjustable in basic parametres. When you select automatic switching then in WEB interface menu will be display "Daily intervals". Here you can programm switching for 3 different intervals for 7 days in week. It is necessary for providing correct functionality to set IP adress of NTP server and provide by IP network setting access of door phone to internet. In automatic switching DAY/NIGHT you can also use temporare manual switching which is cancel by first coming interval of automatic switching.

- Manual switching DAY/NIGHT is by code which is programmed in -"switching codes" parametr.
- mode **2 numbers groups** = first press of button always dials number saved in 1 column (1st group). When you press the same button again, when busy tone is detected or when preprogrammed number of rings is over the IPDP dials number from 2 column (2nd group). When you press the same button again the IPDP dial number from 1<sup>st</sup> group.
- When visitor press the button after IPDP makes line OFF HOOK then door phone hangs up fot time preset by parametr "Time of hanging up before REDIAL". Then picks up and dial new number.

By buttons of IPDP you can dial a code for door opening (code keylock). When visitor at the door press buttons combination which agree to preprogrammed code and time between button press is not longer than preprogrammed time by parametr the IPDP will activate appropriate relay (when is set in mode m=1 or m=5) for time "Closing time".

#### Person Inside Building 2.3

The person inside building is considered as person who is responding Door phone calls by phone.

#### 2.3.1 **Outgoing Call**

Outgoing call is call coming from door phone (inicialize by button press by visitor). After door phone number dialling is ringing phone inside the building. When you picks up the call you can speak to visitor as same as by code dialling you can: activate relay ( when is set in mode m=1 or m=5), switch DAY/NIGHT mode and hang up. The IPDP sends 10sec before end of call duration notification (3 short beeps) and you have an option to prolong the call by dialling (\* / #). By hanging up of phone is call ended...



There are 2 ways how to transmit info about button press (code for door opening, DAY/NIGHT switching code, call prolongation code, code for hanging up etc..) -either in "RTPchannel" or in "SIP info". Version "inband DTMF" is not decoding in IPDP.

#### 2.3.2 Incoming Call

Incoming call is call coming from the building to door phone. (Inicialize by person inside building). After dialling of extension number or IP adress ( where is IPDP connected) the door phone is ringing (LED is flashing).

After preprogrammed number of rings the IPDP picks up and you can talk. Available services are the same as at outgoing call (chapter Chyba! Nenalezen zdroj odkazů.).

## 3.1 Basic VoIP settings

#### 3.1.1 Choosing a mode and login

Very important is select firstly mode of IPDP in which will work inside IP network. It is P2P (peer to peer) or IPDP is registrated to SIP server. It is selected by DIP **switch 2** – picture 7. The mode you cant change from WEB interface. The change of DIP switch is performed always after restart. Other switches are in position "on" (normal). The IPDP we switch on and wait cca 1 min for unit start up.

Default setting which makes erasing of preprogrammed parametres values is perform by DIP **switch 3** – which put to position off. Then make restart of unit. After unit start up you must return DIP switch 3 to position ON .

Setting of basic IP address 192.168.1.250 make by DIP **switch 4** move to the position off and restart the doorphone. After unit restart you must return the DIP switch 4 to the position On.

The Doorphone Restart you can make by 2 ways – either by disconnection and connection of power or by clicking on "Restart" in WEB interface .



Picture 7 DIP switch setting

IP address of doorphone is from the manufacturer (as well as default) setting on 192.168.1.250. When you are in different IP network numbering (= NOT START 192.168.1.xxx) then you have to programm in features of TCP/IP protocol at your PC either temporare IP adress or as alternative configuration for example: 192.168.1.245. Then you can programm Door phones parametres including IP adress and after restart of unit you can be connected to WEB interface of door phone at new IP adress.

**CAUTION:** DIP switch 3 and 4 must be in position "**on**" otherwise after restart new IP adress will be rewritten back to default IP adress = 192.168.1.250.

In your web browser enter IP address of the DoorPhone, default is 192.168.1.250. See picture 8.



#### Picture 8 First site - video from camera

Enter user name and password. User name is "admin", default password is "1234". See picture 9.



	Připojit se k 192.168.1.250 ?	×
C P	Setup Uživatelské jméno: 😰 admin Heslo: 💽 Zapamatovat heslo	•
Stop Play Setup	OK Storno	

#### Picture 9 Login to setup

#### 3.1.2 Language option

Language setting can be made in a menu on the left panel. How add new language is descripe on page 28

LOGO	Network setting:		
Day mode	Hostname:	IPDP	
Menu:	Setup via DHCP:		
<ul> <li>Network setting</li> <li>Basic parameters</li> </ul>	DHCP client ID:		
SIP parameters     Setting audio	IP address:	192.168.1.250	
Setting video     Relays     Time parameters	Network mask:	255.255.255.0	
Memory numbers     Day Intervals	Default gateway:	192.168.1.200	
User interface     Service	Primary DNS server:	78.41.19.2	
• Video • Help	Secondary DNS server:	78.41.19.3	
Language:			
english Set	default values	save and restart	
Francais Italiano english german			

#### 3.1.3 Network settings

Network settings you find at the **Network seting** menu . It is possible to use DHCP service (1) or you can enter IP addresses manually.

#### Manual configuration:

LOGO (4)	Network setting:		
Day mode	Hostname	IPDP	1
Menu:	Setup via DHCP:		0
Network setting     Sasic parameters	DHCP dient ID:		3
SIP parameters     Setting audio     Sotting video	IP address:	192.168.1.250	-
Relays     Time parameters	Network mask:	255.255.255.0	-
Memory numbers     Day Intervals	Default gateway:	192.168.1.200	
• User Interface • Service • Video	Primary DNS server:	78.41.19.2	
• Help (6)	Secondary DNS server:	78.41.19.3	
Language:	default values	save and restart	
english 👻 Set			

After making changes click on a save and restart button.

- 1. Hostname name of doorphone for resolution in nets (e.g. when you use more doorphones more entrance)
- 2. Enable/disable ethernet settings via DHCP
- 3. Setting IP address, mask, eventually next network parameters, in case of any issue contact your IT manager
- 4. Showing of current mode of IPDP DAY / NIGHT
- 5. Return back to main page with showing the video from door phone
- 6. short help for quick assistance in setting the parameters
- Factory setting DEFAULT perform default settings. After default setting click on button "save and restart". It is showing screen with restarting of the unit – via page Chyba! Záložka není definována..

#### **DHCP** configuration:

Network setting:		
Hostname:	IPDP	1
Setup via DHCP:	2	
DHCP client ID:	udv_guard	3
IP address:	192.168.1.250	
Network mask:	255.255.255.0	
Default gateway:	192.168.1.200	(4)
Primary DNS server:	78.41.19.2	
Secondary DNS server	78.41.19.3	
	5	
default values	save and restart	
	Network Hostname: Setup via DHCP: DHCP dient ID: IP address: Network mask: Default gateway: Primary DNS server: Secondary DNS server: default values	Network setting:         Hostname:       IPDP         Setup via DHCP: <ul> <li></li></ul>

After making changes click on a save and restart button.

- 1. Hostname name of doorphone for resolution in nets (e.g. when you use more doorphones more entrance)
- 2. Enable/disable ethernet settings via DHCP
- DHCP client ID is name, which using for assigning two IP address to only one MAC address (in IPDP has a sense meaning as far as will be including internal SIP server)
- 4. Showing parameters automatically assign by DHCP IP address and next setting
- **5.** DEFAULT perform factory setting. After making changes click on a save and restart button (display screen see page 30).

**Important:** If you use setup via DHCP, then it's assigning IP address to DoorPhone automatically and network administrator must tell you current IP address to be able see video in web browser. However this dynamically assigned adress might be changed by power failure etc.., we recommend you to set fix IP adress for IPDP.

#### 3.1.4 Peer to peer or SIP server connection

The IPDP can operate in **peer to peer** (P2P) mode or as SIP client (SIP server registration). This mode in which you desire to operate the unit is selected by DIP switch (page 16) In P2P mode the IPDP calls IP adress – saved in memory numbers (page 36).



- Selection of incoming call signalling Ringing as default. It is possible change to Session progress – it is suitable for certain SIP proxy servers which are asking for.
- 2. Symmetrical RTP it is suitable for certain SIP proxy servers which are asking for.
- 3. DEFAULT factory setting. After making changes click on button " save changes".

When you set **SIP server (client**) mode by DIP switch then contents of "SIP setting" item in menu is changed. You will set different parametres than in P2P mode.

LOGO	SIP parameters:			
Night mode	SIP proxy server	Address: Port: Name:	5060	1
Network setting     Basic parameters     SIP parameters     Setting audio     Setting video     Relays     Time parameters     Memory numbers     User interface     Service     Video     Help Language: english     Set	Use (180 Ringing) Use (183 Session Enable Simmetric	Password: Expiration [sec]: progress): • • RTP: • • • it values • • save of	a 600	3

- 1. SIP proxy server IP adress or the SIP server name and port (usually 5060 or 5061)
- 2. Registration data for SIP proxy server connection (not mandatory)
- 3. Expiry time of registration to SIP server (interval of sending request for reregistration)
- 4. Selection of incoming call signalling Ringing as default. It is possible change to Session progress it is suitable for certain SIP proxy servers which are asking for.
- 5. Symmetrical RTP it is suitable for certain SIP proxy servers which are asking for
- 6. DEFAULT factory setting. After making changes click on button " save changes"

#### 3.1.5 Audio codec setting

LOGO	Setting audio:	
Day mode	Deinsite 1. (714).	
Menu:	Priority 2: G711a • (1)	
Network setting     Basic parameters     SIP parameters     Setting audio     Setting video	Priority 3: G726-32bit  Priority 4: GSM	
Relays     Time parameters     Memory numbers     Day Intervals     User interface     Service	default values save changes	
• Video • Help		
Language:		
english 👻 Set		

- 1. Here you select priority of audio codec usage. Voice codec is selected automatically and in SIP protocol it is confirmed by both sides.
- 2. DEFAULT factory setting. After making changes click on button " save changes"

#### 3.1.6 Setting video

LOGO	Setting video:
Day mode Menu: • Network setting • Basic parameters • SIP parameters • Setting audio • Setting audio • Relays • Time parameters • Relays • Time parameters • Day Intervals • Day Intervals • User interface • Service • Video • Help Language: english • Set	Image size: 320 × 240 • 1 Numbers image per sec.: 2 • 2 Brightness: Colour: Hue: Gamma: 4 default values save changes

- 1. Resolution of showing video
- 2. Number picture per second (frequency restoring picture )
- 3. Setting next parameters of camera
- 1. DEFAULT factory setting. After making changes click on button " save changes.

#### 3.1.7 Viewing the video (programme PopUp)

Video in doorphone IPDP is provided by USB WEB camera.

The image from camera is sending: a) in format JPEG (pictures) to WEB browser (first page on IP adress of IPDP), b) in format MJPEG (motion JPEG) to iBell Windows software, c) in stream video format H.263 and H.264.

This stream video is visible on certain types of IP phones with LCD display (e.g. Grandstream, Yealink, Snom, etc.)

Very efficient to see video from IPDP is using iBell software for Windows. This programm including its manual is free downloadable on <u>http://www.alphatechtechnologies.cz</u>.

#### 3.1.8 Day intervals

They will be shown only when at Basic parametres is activated automatic switching DAY/NIGHT. (since firmware release V 5.8). (page 33.)

	Day	Inter	Vals:			
Day mode		Int	terval 1	Interval 2	Interval 3	
Menu:	Sun:		]-[	) — - — )	<u> </u>	]
Network setting	Mon:	08:00	- 15:00	) — - — (		
Basic parameters     SIP parameters	Tue:	07:00	- 11:30	12:30 - 16:00		0
Setting audio     Setting uideo	Wed:		]-[			
Relays     Time parameters	Thu:	[	]_[	) <u> </u>		
Memory numbers	Fri:		-			1
Day Intervals     User interface	Sat:		1			
• Service • Video • Help	All out	En side en	npty day lin Itered inter	ne is considered as rvals in one day is c	full day. onsidered as night	t.
Language:			default va	lues save chan	ges	
english - Set						

- 1. Showing of present time of internal clocks clocks setting you perform in "Service time server".
- Intervals setting table when is DAY for rest of time is NIGHT. For example : Interval 1 = 08:00-12:00 and Interval 2 = 14:00-17:00, then from midnight to 7:59 is night, since 8h to 12h is DAY and since 12:01 to 13:59 is NIGHT. Since 14h to 17h is DAY and rest until midnight is NIGHT.
- 3. DEFAULT factory setting. After making changes click on button " save changes.

#### 3.1.9 User interface

LOGO	User interface	e:	
Day mode Day mode Menu:  Network setting Basic parameters SIP parameters	Video on start page: Video in VoIP call : Web interface tcp port: Enable telpet:	V V 80	() () () () () () () () () () () () () (
Setting audio     Setting video     Relays     Time parameters     Memory numbers     Day Intervals     User interface     Service     Video     Help	default values save ar	nd restart	4
Language:			

- 1. Video switch ON / OFF from main page of WEB interface (mainly from security reasons, when you switch off the video then is accessable through password registration only).
- Video switching ON/OFF during communication some IP systems cant process SIP call includes video
- 3. Possibility change standard TCP port 80 to some other port
- 4. Possibility switch ON / OFF acces through Telnet
- 5. DEFAULT factory setting. After making changes click on button " save changes

#### 3.1.10 Service settings

LOGO	Admin services:
Day mode Menu:   Network setting Basic parameters	VoIP version: 1.39 UDV version: 5.8 Download log file Show call log Show VoIP log
SIP parameters     Setting audio     Setting video     Relays     Time parameters     Memory numbers     Day Intervals	(4) Time server:
User interface     Service     Video     Help	save 6
Language:	Firmware upgrade:
	Upload language:
	Save configuration:
	Upload configuration:
	Service password:
	(12) restart

- Showing of firmware release in VoIP modul and Door phone modul. The button "extended log" switching way of savings SIP communication history in extended more details but shorter time period) or normal format. It isvery useful during fixing some problems. The button "Basic LOG" or "Extended LOG" showing into which format is LOG switched, it means you see button "Extended LOG" it means that it is now in Basic LOG and when you press button "Extended LOG" you switch it to Extended LOG format and you will see BASIC LOG sign on button.
- Click on "Download log file" the file is saved to selected place. The file has extension ".BIN". It must be renamed to".TAR". To open archive "tar" use for example programm "<u>PowerArchiver</u>". The file from archive makes with extension ".TXT".

We would like notify you that text file has not standard ending or rows CR LF but LF only. To show correctly the rows we recommend use programm "PSPad".

- Show calls report show call report commands only Show report of registrationsí – here is shown registration procedure with result – succesfull / unsuccesfull
- Show VoIP report in new window of WEB browser is showing SIP monitor – it is log file in real time.
- 5. IP adress of NTP server server for setting exact time from internet. (clocks for automatic switching of DAY/NIGHT mode as same as clocks for saving events to log file especially syslog server). When you dont know the adress use \* and systém select the suitable one. (to window write \* and click on savet).
- 6. Syslog server is IP adress of computer where is running syslog aplication for collection network events
- 7. The tool for upgrade firmware in VoIP modul as same as doorphone part. Up head of file is intend for which modul it is. Further you download viat this tool graphical style of WEB interface – colors, fonts,logo....
- Adding of language file download or rewrite language programm support.
   2 basic language ( czech + english) are not editable
- 9. Save configuration save present setting in IPDP (all features)
- 10.Restore configuration restores setting of all IPDP features by previous saved configuration.
- 11. Change access password, default is 1234
- 12.VoIP modul restart neccessary when you download new firmware.

#### 3.1.11 Restart

LOGO	Waiting for restart		
Day mode			
Menu:			
<ul> <li>Network setting</li> <li>Basic parameters</li> <li>SIP parameters</li> <li>Setting audio</li> <li>Setting video</li> <li>Relays</li> <li>Time parameters</li> <li>Memory numbers</li> <li>Day Intervals</li> <li>User interface</li> <li>Service</li> <li>Video</li> <li>Help</li> </ul>			
Language:			
english 👻 Set			

#### 3.1.12 Preparation style, language support

The file of style is including 3 files which are packed (zip) to archiv "TAR". To unpack ( unzip) archiv "TAR" use programm "<u>PowerArchiver</u>".

First file "upload\_fw.sh is head of file for style which should be not changed! Second file is HTML style in syntax HTML. It is possible change font size, fonts, colors, character and lines, background color. This file you can edit up your desire.

To see how did you make it please use programm "PSPad".

Third file is picture (company logo) size is max.190x190px in format GIF, JPG. Please preffer GIF with setting transparent background. Afterward rename the picture on "logo.img"

To pack new archive with your style and logo use programm "<u>PowerArchiver</u>", set archive "tar" and option "tarred".

#### Language support

Basic file for getting your new language file coming from English or Czech language. The translation includes also text of Help.

Name of file is language name in menu. Therefore not use dot (.) and extension for your language file name – write only english.

To edit language use programm "<u>PSPad</u>".Translate only terms in quotation mark and please keep marks and signs in HTML formatting. Character set is setting to ISO8859-2.

## 3.2 Setting DoorPhone parameters

3.2.1 Basic Parameters

LOGO	Basic parameters:		
Day mode	Mode of choice numbers: Day-Night 2 group of numbers	Prolongation char:	
<ul> <li>Network setting</li> <li>Basic parameters</li> <li>SIP parameters</li> <li>SiP parameters</li> <li>Setting audio</li> <li>Setting video</li> <li>Relays</li> <li>Time parameters</li> <li>Memory numbers</li> <li>Day Intervals</li> <li>User interface</li> <li>Service</li> <li>Video</li> <li>Help</li> </ul> Language: english Set	Hang up phone: 3 Code for hang up phone 55 1: Code for hang up phone 66 2: Switching between Day Night: Manualy 5 Automatic Keyboard to position: 0 (	Code of switching: 4 Code for switching Day: 11 Code for switching Night: 10 Mode of keyboard: Direct choice number (phone) Choice of number from memory () 8 save changes	

After making changes do not forget click on "save changes" button

- Mode of numbers dial the numbers are dialled either up DAY/NIGHT mode or from first or second group - explain on page Chyba! Záložka není definována.
- Character to prolong the communication is either \* or # (10sec before ending of communication you get notification from Door phone (3 beeps) about call ending. You can prolong it by pressing \* or # on your phone.)
- 3. Code to hang up the door phone by phone [2 digits]. It is useful to programm the same code for relay activation as same as code for hanging up the door phone. (page 34).
- Code for switching DAY / NIGHT mode Note: Switching to Day/Night mode stays in IPDP even after power supply disconnection.
- DAY/NIGHT switching is done manually (codes using by phone) or automatically – then is valid table of Daily intervals and must be programm time server NTP in menu "Service"
- 6. designed for modular IPDP so no useful for Slim version
- 7. designed for modular IPDP so no useful for Slim version
- 8. DEFAULT factory setting. After making changes click on button " save changes

**ATTENTION!** Those parametres seriously influence Door Phone behaviour.

LOGO	Relays:		
Day mode	Relay 1:		
Menu:	Relay mode: 1		
Network setting     Basic parameters	External code day + night: 121		
SIP parameters     Setting audio	External code day:		
Setting video     Relays	External code night:		
Time parameters     Memory numbers	Internal code from phone: 55		
User interface     Service	Relay closing [sec]: 05 (4)		
• Video • Help	Control of incoming call: 🛛 🗍		
Language:	Relay 2:		
english - Set	Relay mode: 1		
	External code day + night: 212		
	External code day:		
	External code night:		
	Internal code from phone: 66		
	Relay closing [sec]: 05		
	Control of incoming call:		
	Delay between 1 and 2 in mode 5: 10 6 (default values) save changes		

After making changes do not forget click on "save changes" button

- 1. Relay mode:
  - =1 switch mode it activates relay by code for certain time "time closing" (using for electrical locks, gate opening etc.)
  - =2 camera mode it activates relay (on) when door phone picks up and deactivate relay (off) when door phone hang up.
  - =3 lighting mode – it activates relay when door phone picks up and relay stays on for certain time "time closing" even after hanging up.
  - **=4 bell** mode it activates relay when button at door phone is pressed and relay is deactivated after certain time "**time closing**" (used for e.g. external bell or horn connections).
  - =5 gradual (delay) opening mode in this mode you set mode for relay 2 only. Relay 1 must be in mode 1 ( switch mode). By code you activate relay 1 for certain time "time closing 1", then is running time "time

**delay**" and after that is activated Relay 2 automatically for certain time "**time closing 2**". Then Door phone hangs up.

**Note:** The only relay 1 can be activated from phone and all sequence started. Besides that the relay 2 can be separately activated from buttons by password.

- 2. Password (code) to activate relays from Door phone ( by buttons), [2 to 6 digits]. There is totally 6x codes which are control by DAY/NIGHT mode setting. The code is inserting by Door phone buttons combination ( 1 or 2 buttons only). Relay activation is influenced by programmed **relay mode** as same as **DAY/NIGHT mode**. When you use mode of dial " 2 groups" the door phone is permanently in mode **DAY**.
- 3. Code by phone for relay activation [2 digits]. You can programm the same code for both relays. Then both relays will be activated at the same time when you dial the code. We recommend to programm the same code for relay activation as same as door phone hanging up (page 33).
- 4. Closing time for which is relay activated (on) [2 digits, 01-99]
- 5. Permitt / Prohibit to control relay during incoming call.
- Delay time between activation relay 1 and relay 2 when is used mode 5 at relay 2, m=5 (gradual opening), [2 digits 01-99]
- 7. Default factory setting. After making changes click on button " save changes

#### 3.2.3 Time Parameters

LOGO	Time parameters:		
Day mode Menu:  Network setting Basic parameters SiP parameters Setting audio Setting video Relays Time parameters Day Intervals Day Intervals User interface Service Video Help Language:  english	Maximum call duration [min]: Numbers of rings: Time between key presses [sec]: Time hang up before redial [sec]: Time before redial [sec]: Audio signaling - opening/closing: Audio signaling - others tones: (8) (9) (9) (9) (9) (9) (9) (9) (9) (9) (9	2 1 2 2 25 V	0000000

- 1. max. time of call duration. It might be prolong by dialling characters (\* or #) from phone. (page 33.).
- 2. Number of incoming call rings before picks up. Adjustable from 1 to 9. After detection of first ring starts flashing LED on front panel. After preprogrammed number of rings the unit automatically picks up.
- 3. max. time [sec] between button presses [from 1-9]
  - relay closing when time between presses of 2 following buttons is longer then code for relay activation is not evaluated correctly.
  - Number dial when first button we press is also first digit in code for relay activation from door phone then dial of number is delayed about this time.
- 4. time [sec] for which door phone hang up before REDIAL (button press during communication, busy tone detection), [from 1-5]
- 5. After dial is finished waiting this time. When this time is over and communication wasn't established or the line is busy the IPDP hangs up [from 04-99]. The dial is repated when you use mode of **2 groups of numbers**..
- 6. In factory setting is acoustically signalling what is processed by door phone. If signalling makes you a problem you can switch it Off.
- 7. Default factory setting. After making changes click on button " save changes

#### 3.2.4 Direct Dialing – Memories

LOGO		Memory num	bers: (2)
Day mode		Group DAY	Group NIGHT
	Button 1:	192*168*1*231	192*168*1*230
Menu:	Button 2:	192*168*1*232	192*168*1*230
Network setting	Button 3:	150#192*168*1*220	
Basic parameters     SID parameters	Button 4:	1	
Setting audio	Button 5:		
Setting video     Relays	Button 6:		
Time parameters	Button 7:		
Day Intervals	Button 8:		
User interface     Service	Button 9:		
• Video • Help Language: english • Set	Button 10:		
	Button 11:		
	Button 12:		
	Button 13:		
	Button 14:		
	Button 63:		1
	Button 64:	3	
	def	ault values s	ave changes

After making changes do not forget click on "save changes" button

- Button number (memories) phone number up 25 digits we desire to save. Numbers saved in this column are numbers from **first group**, or numbers from **DAY mode**. When you use P2P mode then you save IP adress under button memory in format 192\*168\*1\*231, where "\*" means ".", . When we use mode SIP client (SIP server) then we save under button memory phone numbers (for example 117).
- Button number (memories) phone number up 16 digits we desire to save. Numbers saved in this column are numbers from second group, or numbers from NIGHT mode. When you use P2P mode then you save IP adress under button memory in format 192\*168\*1\*231, where "\*" means ".", . When we use mode SIP client ( SIP server) then we save under button memory phone numbers ( for example 117).

*Note.* Phone number in P2P mode you can save in format 123456#192\*168\*1\*231

*Note.* Switching of DAY/NIGHT mode stays in door phone even after power disconnection

3. Default value – presetings to the firm settings. After making changes use the save changes button.

## **4.1 Electrical Parameters**

Parameter	Value	Conditions
Communication interface	Ethernet 10BaseT, 100BaseTx	
VoIP protocol supported	SIP	
Audio	G.711u, G.711a, G.726-32b, GSM	
Video	série JPEG, MJPG, stream H.263	
Video	(H.264 – end 2010)	
Band width	300Hz – 3400 Hz	
Power supply - adapter	12Vss ± 2V , 12Vst ± 1V	
- or PoE	IEEE802,3af Altern. A+B	
Max. consumption	300mA	12Vss
Max. voltage of switch contact	48V	at I < 1A
Max. current of switch contact	2A	at U < 30 V
Operational temperature	- 20 to + 70°C	

#### 4.2 Mechanical dimensions

Type of item	dimensions HxWxD [mm]
Slim IPDP-01	185 x 99 x 40
Slim IPDP-02	185 x 99 x 40
Slim IPDP-01C	185 x 99 x 40
Slim IPDP-02C	185 x 99 x 40
Slim IPDP-01C antivandal	185 x 99 x 40

Protection against water and insinuation objects of all types doorphones is IP44.

## 4.3 Parameters of video

#### Video for WEB:

InternetExplorer - (batch JPEG pictures - port 80) is used over and over again repeated http request ADRESA/video.jpg

Mozilla, opera, Firefox ... and programme PopUp (UDVguard) - (MJPEG stream - port 80) is used http request ADRESA/video.mjpg (sometimes it is necessary reload than it start up). This video is continuous and has smaller load nets.

#### Stream video for IP phones:

H.263 - IPDPvrátný and videophone settling over SIP/SDP protocol on standard SIP port and video (also sound) then runs by RTP protocol on ports settle over SIP (usually 9078).

#### Parameters of video:

JPG pictures creates in camera and for all transport protocol are same Size (resolution) of video selects in "Setting video" on WEB Maximum size is given by type USB camera and mostly is 640x480 Stream H.263 knows only CIF resolution (352x288), so that bigger JPEG is cuts and smaller will frame

Frequency (1 5obr./sec) JPG pictures selects in "Setting video" on WEB Frequency MJPG and Stream H.263 comes from camera, will use every second and result is moves among 7- 12 fig./sec

#### Ports:

Port **80** for http (WEB pages and JPG (MJPG) video on them) Port **5060** for SIP

Ports RTP with adverse party reason with over SIP, usually suggests port **7078** for audio and port **9078** for video

#### Guarantee conditions:

The product was shop-checked. The producer guarantees that this product will keep the features described in these operating instructions in the course of guarantee provided that the user will be handled with it as described in the operating manual. The guarantee will be extended by period of possible guarantee repair.

When claiming in guarantee period please contact your dealer. The producer only will make the guarantee repairs. Attach the description of claim reason, proof of purchase and your exact address to the product.

#### The guarantee does not include:

- mechanical, thermal, chemical and other damages caused by user's activities
- defects caused by natural disasters
- defects caused by repair or changes carried out by user or other unauthorized person
- willful damage of product
- incorrect use of product caused by other use than specified in operating manual (e.g. installation, programming)
- damages caused during product transport to customer and from supplier

Producer:		
Dealer:		
Date of sale:		

# 

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