NovoSIP

Video intercom SIP with Raspberry Pi and camera for apartment buildings or offices.

Open the door to the driver, to your customers or friends you're at home, at your desk or in your garden from your smart phone or tablet!

The SIP software installed in the NovoSIP, enables communication with the tablet, PC or Smartphone equipped with SIP software (free download) when you press the call button.

The NovoSIP door station behaves like a phone ringing on the smartphone or tablet equipped with Oyoma SIP application. The resident can see the visitor and chose to start the dialogue and open the door by pressing the key icon on his SIP client application software.

Operating principle

Open Source SIP communication where ever you are and with all kind of devices

Open the door

Windows, Android, iPhone ...

Visitor calls   Router transmits   Identifies

The door station NovoSIP includes a great internal SIP server FreeSwitch for residential or office: no need to have an external SIP server in your installation. Just connect the NovoSIP to your router or switch and enter the local IP address in the device you want to communicate. You can also use an external SIP server your choice.
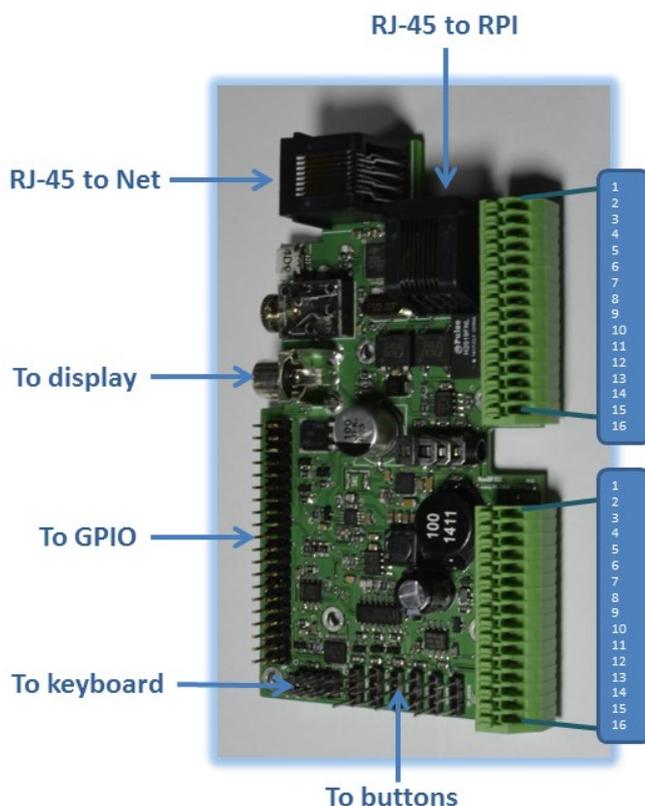
SIP client on Android

Accept the call

Open the door

A powerful solution

◊   Capacity 500 names to call using the alphabetical search on the screen or by direct call number on the keypad

◊   Can work with multiple building access with several door stations

◊   Graphic color display and backlit keyboard stainless steel.

◊   Possibility of using the Raspberry Pi for other purposes such as Bluetooth Low Energy Objects for access control, notifications etc ...

◊   Ethernet connection with PoE including two electric strikes.

◊   Possibility of using three signal LEDs for optional LED (for handicaps, enlightenment and other uses).

◊   Alarm input for various uses: burglary, remained open door etc ...

◊   RS-485 connection for connecting access control.

◊   Works with SIP clients on Android or Windows

Connection details of the card I / O connected to the Raspberry Pi

LOWER			TOP	
1	VIDEO		1	+ 48 V
2	GROUND		2	GROUND
3	SPEAKER +		3	DIODE 0 +
4	SPEAKER −		4	DIODE 0 -
5	+ 12 V		5	DIODE 1 +
6	GROUND		6	DIODE 1 -
7	+ 5 V		7	DIODE 2 +
8	GROUND		8	DIODE 2 -
9	LOCK 1 +		9	AUDIO T
10	LOCK 1 −		10	AUDIO R
11	LOCK 2 +		11	AUDIO S
12	LOCK 2 −		12	FREE
13	ALARM INPUT		13	GROUND
14	GROUND		14	+ 12 V
15	EXIT		15	RS-485 A
16	EXIT		16	RS-485 B

Specifications

- ◊ Aluminium plate 6 mm thick

- ◊ 16 keys keyboard, TFT screen 4.3 "480 x 272

- ◊ Raspberry Pi Model B +

- ◊ Camera 5 million pixels

- ◊ 1.5W speaker - 8 Ohm

- ◊ Electret microphone

- ◊ Connections: 4 x USB, RS-485, GPIO, RJ-45 Ethernet

- ◊ Audio codecs: iSAC, speex, G711, SILK, iLBC, GSM,

- ◊ PCMU, PCMA

- ◊ Video codecs: VP8, H.264, MP4V-ES H.263-1998

- ◊ Echo cancellation

- ◊ SIP Authentication: MD5 Digest

- ◊ SIP Signaling Support: sip RFC3261

- ◊ Encryption: RTP, SRTP

- ◊ Protocol door opening: DTMF, owner

- ◊ Dimensions: 335 x 160 x 50 mm

- ◊ Consummation in stand-by: 6 W

- ◊ Maximum power consumption: 12 W

- ◊ Standard 802.3af PoE door lock included (12V / 7000 mA max)

- ◊ Temperature: -25 degrees Celsius to 50

Examples of setting screens generated by the NovoSIP intenal web server

http://www.novosip.com/