



## 2N® IP Audio Kit

2N® IP Audio Kit is an OEM intercom intended for incorporation into a variety of devices. It is designed to add value to both audio communication and remote surveillance and control. With it, users get both live support and the ability to ask for advice at the touch of a button.



Parking systems  
Information boards  
Industrial facilities

Emergency points  
ATMs

### A VoIP solution you don't have to develop

Incorporate The 2N® IP Audio Kit is easily incorporated into your existing device. Thanks to IP technology you simply extend it to include audio functionality.

### Simple DIN rail mounting

The 2N® IP Audio Kit is suitable for mounting on a standard TS 35 DIN rail, preferably at least 14 cm long.

### A wide range of connectors

Choose from a wide range of interfaces. Hook up a microphone, speakers, headphones or keypad buttons.

# 2N® IP Audio Kit

## FEATURES & BENEFITS

### SIP support, with no server needed

With its SIP protocol support the intercom easily links with IP phones and PBX from other producers, without having to connect to the server.

### Time profiles

This function allows you to define the time period a given telephone number or access code are valid.

### Remote control

The HTTP API allows OEM intercom systems to be easily integrated into the master system for remote administration.

### User defined sounds

There are up to 10 user slots for uploading user-defined sounds (e.g., vocal guidance or warning messages).

### Adaptive volume

The 2N® IP Audio Kit automatically adjusts speaker volume based on ambient noise level.

### Power supply

2N® IP Audio Kit can be powered by PoE or from a 12 V source.

## DIAGRAM



## TECHNICAL PARAMETERS

### Signalling protocol

SIP 2.0 (UDP)

### Audio stream

RTP/RTSP Protocols G.711 Codecs  
Volume control adjustable, with auto adaptive mode  
Full duplex Yes (AEC)

### Power supply

From an external source Typically 12V DC (9-36V DC), max. 2A  
PoE 802.3af (Class 0 - Max. 12.95 W)

### LAN interface

LAN interfaces available 1  
PoE 802.3af  
Parameters 10/100BASE-TX with Auto-MDIX, RJ-45  
Recommended wiring Cat-5e or better

### Supported protocols

SIP2.0, DHCP opt. 66, SMTP, 802.1x, RTSP, RTP, TFTP, HTTP, HTTPS, Syslog

### Audio interface

Microphone input Basic electric microphone  
Amplifier output Amplifier class D, output MONO, THD < 1%  
Max. 10W/4Ω  
Max. 5W/8Ω  
Max. 2.5W/16Ω  
Line output 600Ω

### Buttons/keypad interface

Number of buttons Up to 16 independent buttons in a 4 x 4 matrix  
Matrix outputs 4 (ROW1-4 connectors)  
Uout < 0,1V (L), Uout > 3,2V (H), max. 8mA  
Matrix inputs 4 (COL1-4 connectors)  
Uin < 1,15 (L), Uin > 2,15V, max. Uin = 5V

### LED indicator outputs

Number of outputs 3 (LED1+-, LED2+- and LED3+- connectors)

Output current Typically 20mA  
Output voltage Max. 12V (note. 1)

### Digital outputs

Number of outputs 2 (OUT1+- and OUT2+- connectors)  
Type of outputs Power output with short circuit protection  
Output voltage 12V (note. 1)  
Active switch output 7 to 11 V DC depending on Power supply (PoE: 10 V; adapter: source voltage minus 2 V, max. 11 V DC), max 400 mA

### Logical inputs

Number of inputs 2 (IN1+- and IN2+- connectors)  
Input type Galvanically isolated inputs (optocouplers)  
Characteristics Uin < 1,1V (L), Uin > 3V (H), max. Uin = 32V

### Relay output

Number of outputs 1 (NC, NO, COM connectors)  
Limiting parameters (DC) Max. 30VDC/1A  
Limiting parameters (AC) Max. 125VAC/0.3A

### Mechanical properties

Operating temperature -40°C - 55°C  
Operating relative humidity 10%-95% (non-condensing)  
Storage temperature -40°C-70°C  
Dimensions 142x98x34 mm (ord. ref. 9154100)  
138x90x26 mm (ord. ref. 9154101)  
Weight max. 280g (ord. ref. 9154100)  
max. 150g (ord. ref. 9154101)  
Ingress Protection IP20 (ord. ref. 9154100)  
IP00 (ord. ref. 9154101)  
Mounting on wall, or DIN rail  
Note If the device is supplied connected to a DC voltage source and the power supply voltage is below 12V, then the output voltage is limited to the value of the supply voltage.

## SOFTWARE

**2N® Access Commander** - software for managing 2N IP intercoms and access units

**2N® Network Scanner** - an application for detecting 2N IP intercoms and access control units on the network

**2N® Mobile Video** - an application for unlocking the door remotely with a mobile phone