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.

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FEATURES & BENEFITS

SIP support, with no server needed
With it's 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 easilyintegrated into the master system for remote administration.

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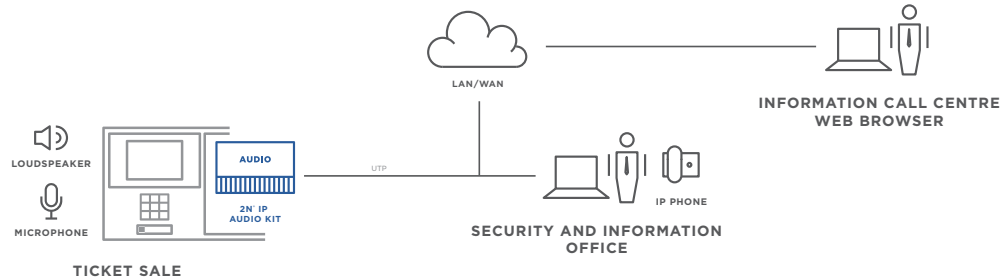There are up to 10 user slots for uploading user-defined sounds (e.g.,vocal guidance or warning messages).

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

LOUDSPEAKER

MICROPHONE

AUDIO

2N˙ IP
AUDIO KIT

TICKET SALE

UTP

LAN/WAN

SECURITY AND INFORMATION OFFICE

IP PHONE

INFORMATION CALL CENTRE
WEB BROWSER

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
Weight max.	280g
Ingress Protection	IP20
Mountingon 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