



# 2N<sup>®</sup> Helios IP Audio Kit

Voice communication for all equipment



## Offer your customers convenience



Have you ever wondered just how many misunderstandings could have been avoided if you could have communicated directly with a customer who needs assistance with the car park pay point in a shopping centre? By simply pressing a button the customer could call and ask for help.

With the 2N<sup>®</sup> Helios IP Audio Kit solution, you can now afford your customers the convenience of a live attendant, and be a step ahead of the competition!

This compact module offers a range of interfaces as in microphone, loudspeaker, button and keyboard connections with universal inputs and outputs for controlling lighting or barriers.

### Use:

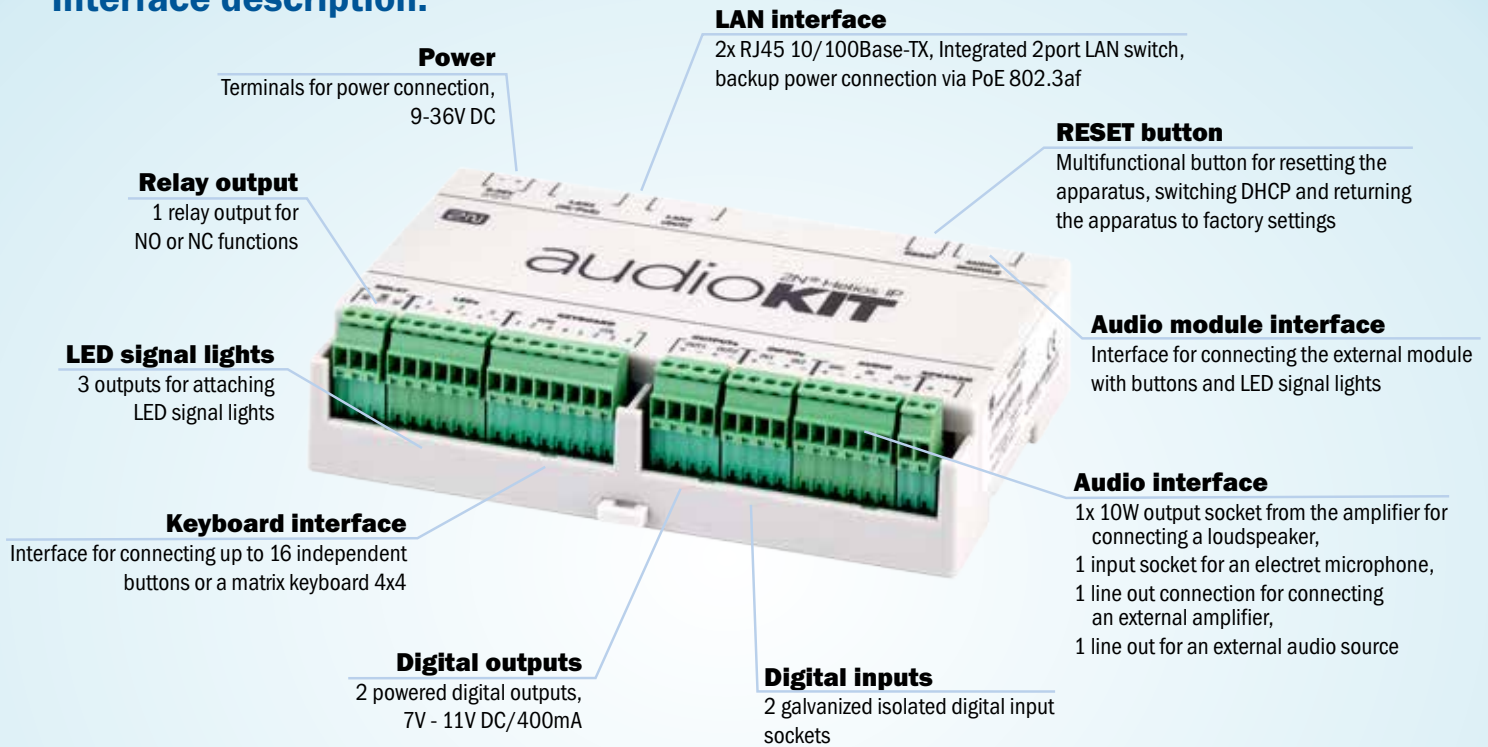
- **Parking systems**  
Communications functionalities for gates, barrier control and pay points.
- **Information points**  
Information boards with the capability of immediate connection with a vacant hotel or taxi service.
- **Emergency communication points**  
Built-in intercoms.
- **Industrial furnishings**  
Workplace equipment with a built-in intercom to alert the foreman or maintenance staff quickly.
- **Cash dispensers**  
Make immediate contact with the bank possible if your card has been retained.

### Why choose the 2N<sup>®</sup> Helios IP Audio Kit?

- Communication using SIP 2.0 protocol
- Integrated web server for easy configuration
- Power supply via PoE or from an external source
- Wide connectivity options
- Powerful, 10W amplifier
- Outputs for 3 LED signal lights



## Interface description:



## Accessories possible:



Illuminated button



Microphone



Loudspeaker



Wall-mounting bracket or on DIN rail

## Technical parameters:

<b>Signalling protocol</b>	
	SIP 2.0 (UDP)
<b>Audio stream</b>	
Protocols	RTP/RTSP
Codecs	G.711
Volume control	adjustable with automatic adaptive settings
Full duplex	Yes (AEC)
<b>Power source</b>	
From external source	Type 12V DC (9 - 36V DC), max. 2A
PoE	802.3af (Class 0 - Max. 12.95W)
<b>LAN interface</b>	
Number of LAN interfaces	2 (LAN1 and LAN2)
PoE	802.3af only on LAN1
Parameters	10/100BASE-TX with Auto-MDIX, RJ-45
Recommended cable sizes	Cat-5e or better
<b>Audio interface</b>	
Microphone input	Normal electret microphone
Amplifier output	Class D amplifier, MONO output socket, THD < 1%
	Max. 10W/4Ω
	Max. 5W /8Ω
	Max. 2.5W/16Ω
Line out socket	600Ω
<b>Button/keyboard interface</b>	
Number of buttons	Up to 16 independent buttons in 4 x 4 matrix
Matrix outputs	4 (ROW1-4 terminals) $U_{in} < 0.1V (L), U_{in} > 3.2V (H), \text{max. } 8mA$
Matrix inputs	4 (COL1-4 terminals) $U_{in} < 1.15 (L), U_{in} > 2.15V, \text{max. } U_{in} = 5V$
<b>LED control outputs</b>	
Number of outputs	3 (LED1+, LED2+, a LED3+- terminals)
Output current	Typ. 20mA
Output voltage	Max. 12V (see note 1)
<b>Digital outputs</b>	
Number of outputs	2 (OUT1+- a OUT2+- terminals)
Type of output	Powered output socket with short-circuit protection
Output voltage	12V (see note 1)
Active output	7V - 11V DC/400mA
<b>Logic inputs</b>	
Number of inputs	2 (IN1+- a IN2+- terminals)
Input type	Galvanized, isolated inputs (opto-isolators)
Parameters	$U_{in} < 1.1V (L), U_{in} > 3V (H), \text{max. } U_{in} = 32V$
<b>Relay output</b>	
Number of outputs	1 (NC, NO, COM terminals)
Limit parameters (DC)	Max. 30VDC/1A
Limit parameter (AC)	Max. 125VAC/0.3A
<b>Mechanical properties</b>	
Operating temperature	-40°C - 55°C
Operating relative humidity	10% - 95% (not-condensing)
Storage temperature	-40°C - 70°C
Dimensions	142x98x34 mm (order no. 9154100) 138x90x26 mm (order no. 9154101)
Weight	order no. 9154100 max. 280g, order no. 9154101 max. 150g
Protection cover grade	IP20 (order no. 9154100), IP00 (order no. 9154101)
Mounting	on wall or on DIN rail

**Note:** If power supply from adapter does not reach 12V, then the output voltage will be limited to voltage level supplied to the unit.