

# NX1/NX250 INSTALL GUIDE

This guide provides the essential information for installing your new Commтел Nexus intercom.

To help you and your customer get the best out of the system, you can find more information: [Click here](#).



NX1

NX250

## Pre-installation Notes:

- To get started, download the free Commтел CONFIG app from the iOS or Android app stores. Open the app and login or register for an account. Further instruction is provided on page 3 of this guide..
- Remove the faceplate and use the faceplate parking slot in the bottom of the back box to aid installation.
- The auxiliary input is designed for volt-free exit release buttons only. Connecting a powered device or anything other than a volt-free contact may cause damage to the system.
- Ensure the unit is turned off before inserting/removing the SIM or plugging in/unplugging the Ethernet cable or antenna.

### If you are using 4G, ensure:

- You are using a data SIM.
- The SIM has been activated and has a sufficient 4G signal.
- The antenna is correctly positioned to achieve the strongest possible 4G signal.

## We're Here to Support You

If you require further guidance, please don't hesitate to reach out to our trusted technical support team. We're committed to ensuring a smooth setup process.

You can reach us by calling **+44(0)1306 710120** – Option 1, or email: [support@commтел.io](mailto:support@commтел.io)

## Installation Instructions

### Mount the back box to the wall, ensuring that:

- Any swarf/debris is removed from inside the back box – the speaker has a magnet and may attract metal filings.
- The unit is sealed to prevent water ingress – use electronic grade silicone sealant to seal all rear entry holes.
- Ethernet, antenna and power leads are secured using the black plastic gland supplied (M20 x 1.5mm, std electrical thread).
- Ethernet, antenna and power leads have a loop before entering the back box to prevent water ingress along the cable.

### Choose your preferred method of connection:

- Ethernet:** Plug the Ethernet cable into the RJ45 port – use the routing clip to keep the cable secure.
- 4G:** Insert a Data SIM into the SIM card slot.
- Both:** The Ethernet connection will take priority over 4G.

### Wire Relays, Aux Inputs and Power:

- Connect the antenna (if using 4G).
- Connect the relays to the entry equipment.
- Wire any accessories into the Aux inputs.
- Connect power to the I/O Board using the PSU provided. The keypad should cycle through red-green-blue-white whilst booting up. This may take a few minutes.

**Fig 1** – Nexus PCB Board.

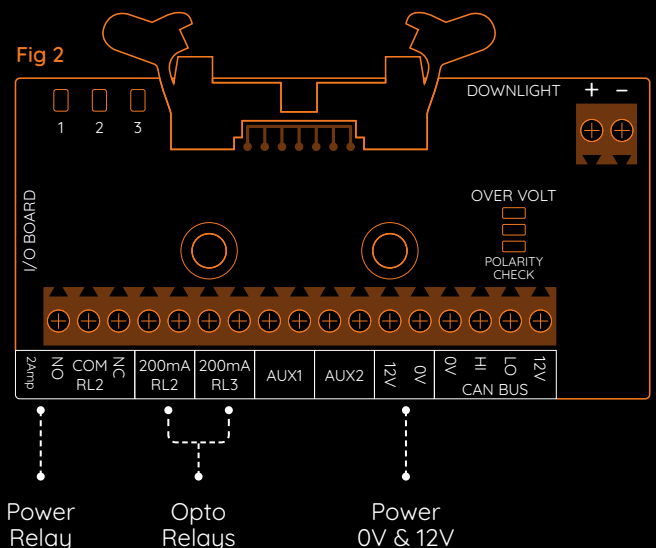
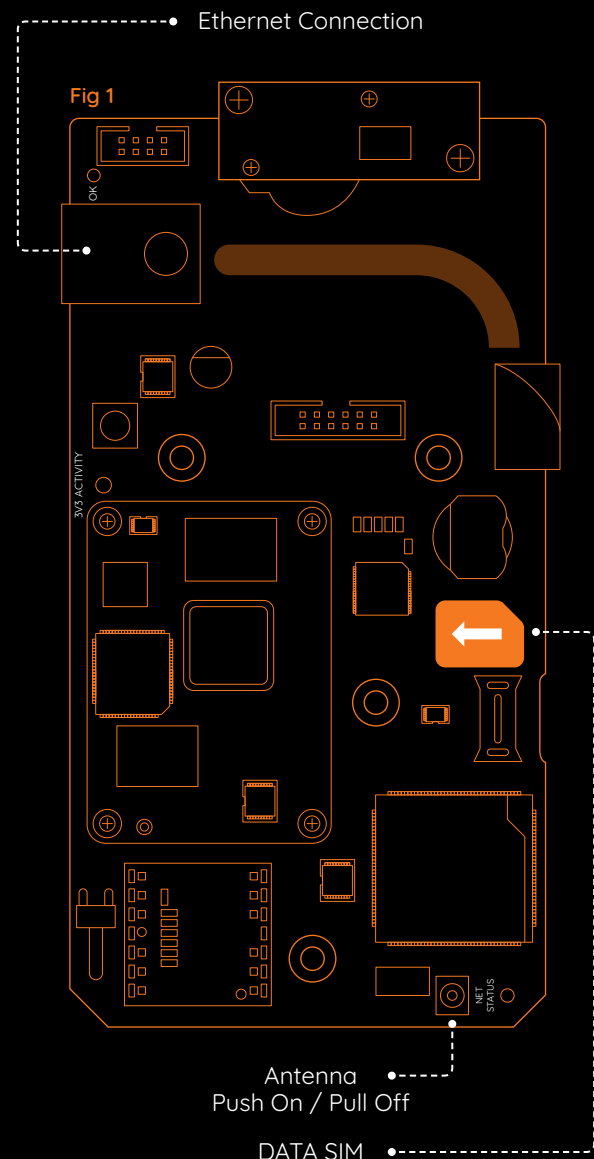
**Fig 2** – Nexus I/O Board.

If you require further guidance, please don't hesitate to reach out to our trusted technical support team. We're committed to ensuring a smooth setup process.

You can reach us by calling **+44(0)1306 710120** – Option 1, or email: [support@commтел.io](mailto:support@commтел.io)

### Connecting a Telpad

If you are connecting a Telpad to this system, it must be wired into the CAN BUS section of the I/O board. Use a 4 core cable, connecting to the following terminals: 0V, 12V, HI & LO



## PCB & I/O Board – LED Status Indicators

LED LOCATION & NAME	LED ACTION	INDICATES
Keypad LEDs	Slow flashing / pulsing orange	Installer mode.
	Cycling through red-green-blue white	System is booting up/rebooting. This process may take a few minutes.
PI PCB – 3V3/Activity LED	Solid orange	Just switched on / booting up.
	Solid green	Module booted up / ready to go.
Main PCB – OK LED (Green)	Flashing when powered on	All OK.
	No Light	If powered on then there is an issue with the PCB.
Main PCB – Network Status LED (Blue)	Off	System is powered off.
	On, solid	Module is on with no connectivity.
	On, blinking	Module has connectivity.
Main PCB – Net Connectivity LED (Purple)	On, flashing	Ethernet connected.
	Off	Ethernet not connected.
I/O Board – Polarity Check LED	Solid green	Polarity OK.
	Solid red	12V & 0V crossed over.
	Solid green & yellow	Over-voltage shutdown (16 to 40 Volts).
I/O Board – Overvolt LED	Solid green, yellow, & red	AC voltage applied (12 or 24 Volts).

## App Initialisation and Configuration

- When in Installer Mode, the keypad will be pulsing orange until the system has finished initialisation via the Commтел CONFIG app. If the keypad is not pulsing orange and the keypad is a solid colour, it has already been set up.
- Open the Commтел CONFIG app and tap '+ Add Panel'. If this is your first time using Commтел CONFIG, you will need to create an account.
- Initialise the panel through the Wizard in the Commтел CONFIG app. This process also walks you through testing the video call and relays. You can find more information about this process in our NEXUS App guide.
- Invite an Admin to the system.  
(This is usually the property owner.)
- Set the panel to live.
- The panel will be visible in your device list. Tap the device in the list to access the rest of the configurable settings.
- As the Installer, you can configure programming for 30 days after initialisation, or until access is revoked by the Admin. The Admin can then invite an Installer to configure the unit at any time after the 30-day period has ended.



You can download the Commтел CONFIG app and Commтел NEXUS app for free, from Android or iOS app stores.

## SIP Calling Flexible Entry Control

### What is SIP?

SIP (Session Initiation Protocol) is a technology that allows the NX1 intercom to make and receive calls over the internet, no need for a video monitor or app-based calling.

### Why would I need a SIP subscription?

A SIP subscription enables two key features that enhance how you control your entry points:

**Dial to open:** Add your phone number to the system's white list and call the intercom to trigger the relay — perfect for quick, remote access using your mobile.

**Voice call alerts:** When a visitor presses the call button, the intercom can dial your mobile or landline as a regular phone call. This keeps things simple and reliable, especially in areas with weak mobile data.

### How do I get it?

SIP functionality is built into the NX1, but you'll need either an existing SIP system or a Commтел subscription to activate it. You can set this up and manage it via the Commтел NEXUS app.

### What are the benefits?

- Works on any phone (mobile or landline)
- No need to install additional apps
- Reliable voice calls, even in low-data areas
- Ideal for users who prefer traditional phone control

### Pricing

£5 + VAT per month or

£60 + VAT per year

### Other Ways to Control Entry

If SIP isn't active, the NX1 still offers smart, secure ways to manage entry:

**In-app controls:** Use the Commтел NEXUS app to view a live video feed and open the entrance remotely by tapping the green open button.

**Entry codes:** Set unique codes to unlock the entrance. These can be restricted using the on-board time clock, so they only work at certain times of day.

	SIP Features			
	4G	Ethernet	4G/Ethernet + SIP (Using your existing SIP system)	4G/Ethernet + SIP (Commтел Subscription)
Video Calls to Nexus App	✓	✓	✓	✓
Phone Calls to Mobile	✗	✗	✓	✓
Phone Calls to Landlines	✗	✗	✓	✓
Dial to Open (Authorised Numbers)	✗	✗	✓	✓
Open with Siri / Google Assistant	Update coming soon			