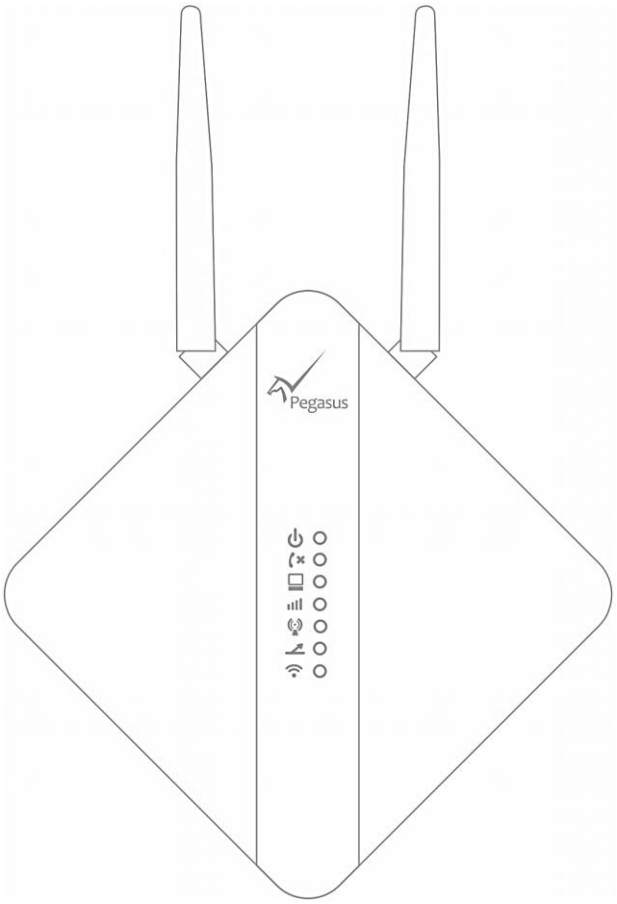
Installation Manual

Pégasus™ NX



Pégasus NX

Installation Manual | June 2013

ETHERNET **GPRS** **WI-FI**

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1 Introduction

1.1. Scope

This Installation Manual is aimed in providing detailed information and complete listing as a reference to install Pegasus™ NX.

1.2. Audience

This Installation Manual is intended for end users who are going to install Pegasus NX. The readers or end-users of this installation manual should be familiar with the Pegasus™ Studio - Configuration Tool and the Zeus™ Server.

Note:

To get information about the Pegasus™ Studio – Configuration Tool, refer the Pegasus™ Studio – User Manual and the Pegasus™ Studio – Quick Start Manual.

To get information about the Zeus™ Server, refer the Zeus Server – User Manual and the Zeus™ Server – Quick Start Manual.

1.3. Contact Information or Comments

For general contact, technical support, questions or comments to report documentation errors and suggestions, contact 3i-Corporation Technical Writing Team.

Our aim is to make this installation manual as helpful as possible. Keep us informed of your comments and suggestions for improvements.

3i-Corporation appreciates feedback from the users of our information.

1.4. Text Conventions

Begin Instruction:

To begin a procedure under any topic, use a numbered list for points.

Note:

Provides a message or reminder related to a topic or section.

Warning:

Information provided under this section MUST be followed.

Several different sources of power can be connected to your Pegasus™ NX. Disconnect all sources of power before servicing. Control units and associated equipments may be damaged by removing and/or inserting SIM cards, or interconnecting cables while the unit is energized.

DO NOT attempt to install, service, or operate this unit until this manual is read and understood.

Caution:

To ensure proper unit operation, this product must be tested in accordance with 3i-Corporation standards. Reacceptance testing is required after any change, addition or deletion of unit components, or after any modification, repair or adjustment to unit hardware or wiring.

Important:

Provides important information related to a topic or section.

Tip:

Provides advice or suggestion related to a topic or section.

Troubleshooting:

Provides information to troubleshoot or fix any Pegasus™ NX related issues or problems.

2 Overview

1.1. About the Installation Manual

This Installation Manual is to describe the Pegasus™ NX functionality, technical specifications, features, and installation instructions including components description, mounting, and wiring.

1.2. What is Pegasus™ NX?

The Pegasus™ NX Alarm Panel Communicator is an extremely compact, robust device in terms of communication interface for alarm panels. It brings the most innovative and reliable technologies for data communication to the Fire and Intrusion Alarm Panels prepared to operate only with conventional telephone lines.

The device is fully compatible with alarm panels that communicate using the contact ID protocol and provides high speed, reliable and low cost communication. It acts as a modem attached to any alarm system that passes digital information to a 24/7 alarm receiving center which is able to respond to the received signal.

Transmission of real time Alarm Panel Events via Wi-Fi Network is possible on failure of other interfaces or when the preferred interface is Wi-Fi. Alteration of the device configuration and upgrade of its firmware (embedded software) is possible remotely via the secured Wi-Fi Network (WPA or WPA2). The device contains an additional LED that acts as Wi-Fi indicator. You can also receive debug messages through Wi-Fi.

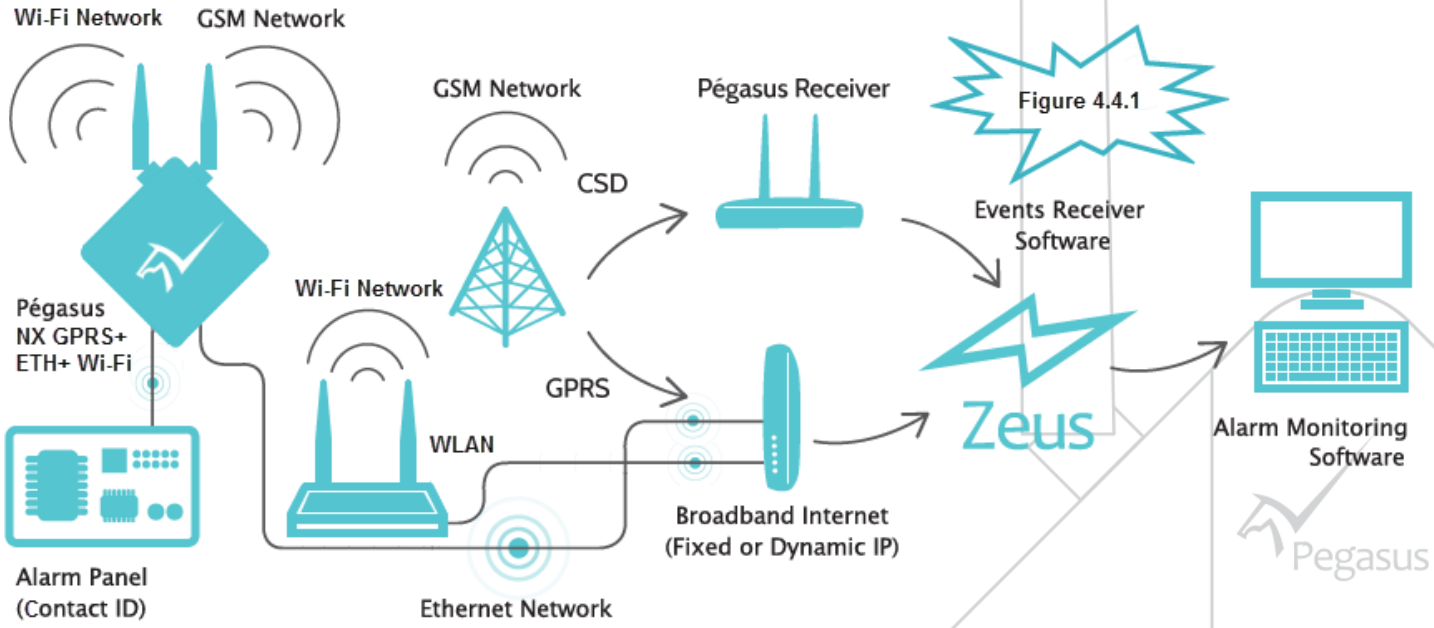
4.3. How Does Pegasus™ NX (Ethernet+GPRS+Wi-Fi) Work?

Pégasus™ Nx when energized enters the Ethernet TCP/IP (Intranet/Internet) or GSM operator network via GPRS (Data Channel) or Wi-Fi Network (as configured in the configuration tool), and though it establishes connection with the ZEUS Server. It creates an online communication channel between the monitored client and the Alarm Monitoring Station, allowing immediate transmission of all events generated by the alarm panel in the Contact ID Protocol.

All information transmitted by the device is encrypted (AES Rijndael128/256 Bit) ensuring maximum confidentiality

The Zeus™ Server, on the other hand, is a multitask software that works as a virtual receiver, capturing the events transmitted by the device and transmitting them to the monitoring software like a conventional receiver simulating the communication protocol of Ademco-685, Sur-Gard MLR2-DG, Sur-Gard vai TCP/IP, Domus-4, CM-PLUS, and Radionics D6600 receivers.

In addition, the ZEUS Server performs an important role in system management, constantly checking the communication with the device (Online or Offline), customer's phone line, Internet link, monitoring station, etc. Any third-party alarm monitoring software can be used.



3 Technical Specifications

Power Supply

1	Input Voltage Range	9VDC – 15VDC	2	Maximum Current	450mA

Battery

1	Battery Type	Lithium-Polymer Capacity: 2000mAh	2	Battery Backup	Up to 6 hours depending on network conditions

Processor

1	CPU	ARM 32bit Cortex-M3	2	Speed	32Mhz

Ethernet

1	Network Standard	IEEE 802.3u compliant fast Ethernet	3	Ethernet Cable	CAT5 MDI/MDI-X auto crossover
2	Data Rate	Full Duplex, 10/100 Base TX Ethernet PHY	4	Protocols	TCP/IP, UDP/IP

GSM/GPRS

1	Modem	Quad-band EGSM 850 / 900 / 1800 / 1900 MHz	5	SIM Card Holder	Dual SIM Support
2	Protocol Support	TCP/IP or UDP/IP	6	Antenna: Impedance	50Ω
3	Antenna Type	External Dipole Antenna Module (DAM)	7	Antenna: Peak Gain	2.0 dBi
4	Antenna: Frequency Range	824-960MHz, 1710-2170MHz	8	Antenna: Return Loss	-4.4 dB

Wi-Fi

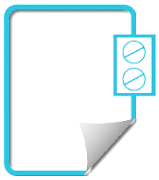
1	Network Standard	EEE 802.11 b, g compliant	6	Security Types	WPA, WPA2
2	Typical WLAN Sensitivity	88dBm at 8% PER, 11Mbps -74dBm at 10% PER, 54Mbps	7	Typical WLAN Transmit Power	+19.5dBm at 11Mbps, CCK (11b) +15.0dBm at 54Mbps, OFDM (11g)
3	WLAN Antenna: Type	External Dipole Antenna Module (DAM)	8	WLAN Antenna: Frequency Range	2.4 - 2.5GHz
4	WLAN Antenna: Impedance	50 Ω	9	WLAN Antenna: Return Loss	10 dB
5	WLAN Antenna: VSWR	2.0 Max	10	WLAN Antenna: Peak Gain	2.0 dBi

Virtual Telephone Line Output

1	Constant Current Source for Alarm Panel	25mA, 20V			

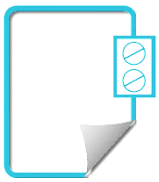
Telephone Line Connection

1	Maximum Telephone Line Voltage Detection	100VAC, 48VDC	2	Minimum Telephone Line Voltage Detection	3VDC



PGMs

1	3 PGMs- Open Collector Type	Supporting 300mA sink current per PGM	2	1 PGM- SPDT Relay	Supporting 125VAC/60VDC @2A



Zones

1	Number Of Wired Zones	Two	3	Supporting Modes	Single mode and Double mode zone interfacing.
2	End of Line Resistor (EOLR)	1K, and 2.2K			

Serial Port

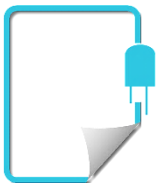
1	Serial Debug (UART) Interface	10 PIN Right-Angled Box Header	3	Baud Rate	115200 Baud
2	Use	For configuration and firmware upgrade, and to view debug messages			

USB

1	USB 2.0 Device Interface	Mini B USB	3	USB Full Speed	12 Mbit/s
2	Use	For configuration and firmware upgrade, and to view debug messages			

Tamper Switch

1	Tamper Type	Internal	2	Use	To trigger an event on unauthorized enclosure opening



LEDs

1	Power On Status	First LED from top to indicate the Power ON Status	5	GSM Status	Fifth LED from top to indicate GSM Status
2	Telephone Line Cut Off	Second LED from top to indicate Telephone Line Cut OFF	6	Alarm	Sixth LED from top to indicate Alarm
3	Online	Third LED from top to indicate Online status	7	Wi-Fi Status	Seventh LED from top to indicate Wi-Fi status
4	GSM Signal Strength	Fourth LED from top to indicate GSM Signal Strength			

Environmental Specifications

1	Operating Temperature	-20℃ - 60℃	3	Storage Temperature	-20℃ - 60℃
2	Relative Humidity	10-90%, no condensation			

Board Dimensions

1	Length	82mm	3	Thickness	1.6mm
2	Width	80mm	4	Number of Layers of PCB	Four

Enclosure Dimensions

1	Length	112mm	3	Height	4.2mm
2	Width	112mm			

4 Pegasus NX Features

- Built-in world-class GSM modules from Telit®;
- Powered by ARM® Cortex 32 Bits Processor;
- Communicates with monitoring station via GSM/GPRS (through dual SIM Cards), Ethernet (TCP/IP or UDP/IP), Wi-Fi (through dual APNs), Telephone Line, SMS, CSD and Voice Call;
- Built-in GSM Jammer Detector, which is essential for security systems based on GSM;
- Can transmit by SMS or CSD in case of data network failure and monitored client phone line cut;
- Has the exclusive FREE CALLS technology, which allows Pégasus™ Nx to send Alive packets (tests) through voice channel;
- Compatible with any alarm panel, which communicates in the Contact ID Protocol;
- Allows simultaneous transmission to two different monitoring station using different
- Supports 8 fixed or dynamic IPs;
- Allows the verification of the monitored customer's telephone line;
- Has phone line cut detector with configurable delay;
- Allows phone line switching for alarm panels download;
- Allows remote configuration and firmware update;
- Has 4 relays (outputs) - 3 PGMs (Open Collector) and 1 PGM (SPDT) that can be controlled remotely;
- Has 2 zone, which are extended to 4 zone inputs;
- Loop test - Allows tests of alarm panel operation;

	interfaces;
☞	Allows local or remote GSM Signal measurement;
☞	Cryptographic data transmission by 128/256 bits encryption;
☞	2000mAh internal lithium-polymer battery;
☞	Built-in tamper switch to detect enclosure opening;
☞	Device status via ECO SMS;

☞	Supervises the physical connection with the alarm panel;
☞	Allows local or remote monitoring and analysis
☞	Modem firmware update over-the –air (FOTA);
	512KB of memory for Logs;
☞	Device status via ECO SMS.

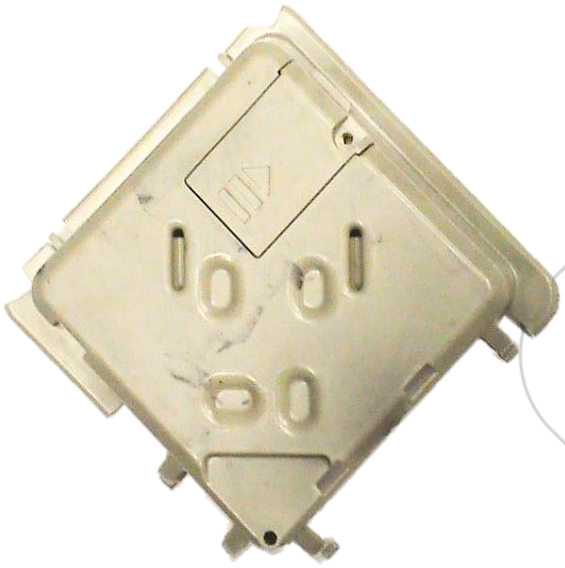
5 Pegasus NX Components Description

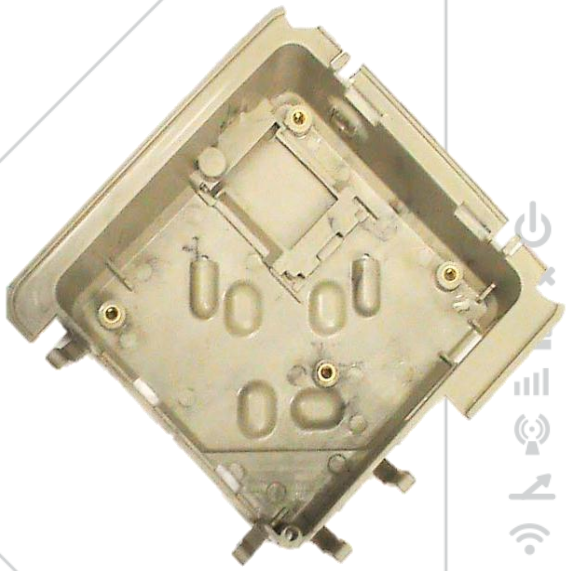
5.1. Pegasus™ NX Components

Pegasus NX is a multi-component device. The major components are rear panel, printed circuit board, front panel, front cover, Wi-Fi antenna, GSM antenna, 3.7V 2000mAh lithium-polymer battery, U.FL/IPX to RP-SMA Pigtail cable, wall mounting bracket, and screws.

Rear Panel

The Rear Panel fits properly on the wall-mounting bracket. The Rear Panel holds the PCB with the help of four screws.



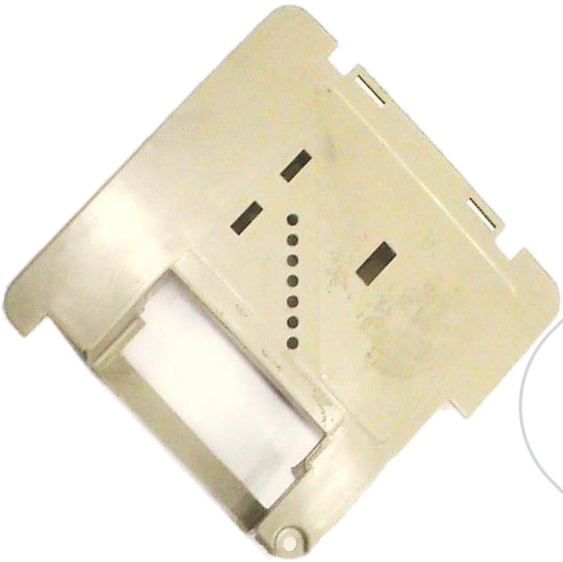


Printed Circuit Board

The Printed Circuit Board fits perfectly inside the Rear Panel. The PCB is secured with the help of four screws.

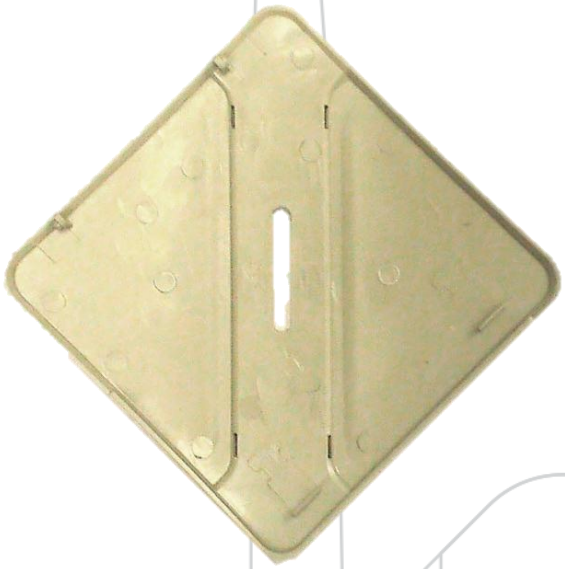
Front Panel

The Front Panel is designed to fit between the Front Cover and the Rear Panel. It fits perfectly on the Rear Panel and secures the PCB, terminals, and battery from damage.



Front Cover

The Front Cover is the outermost panel that can be attached perfectly to the Rear Panel and secures terminals and LEDs.



Wi-Fi Antenna

RP-SMA Wi-Fi antenna is designed to connect to the RP-SMA Wi-Fi adapter (part of the u.FL/IPX to RP-SMA Pigtail Cable Adapter) towards the left side of the device.

The Pegasus™ Wi-Fi antenna is flexible with tilt and swivel design that can be adjusted as per the requirement.

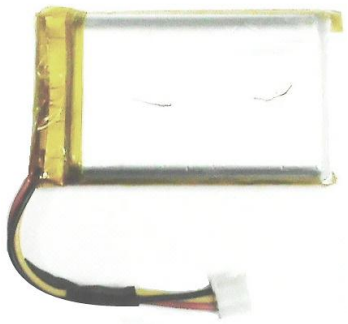
GSM Antenna

RP-SMA GSM antenna is designed to connect to the PCB mounted, right-angled RP-SMA RF jack towards the right side of the device.

The Pegasus™ GSM antenna is flexible with tilt and swivel design that can be adjusted as per the requirement.

Lithium-Polymer Battery

This Lithium-Polymer Battery is secured in the Front Panel of the device.



U.FL/IPX to RP-SMA Pigtail Cable

This cable is used connect the Wi-Fi antenna and is secured in the Rear Panel.

Wall-Mounting Bracket

The wall-mounting bracket helps in fixing the device on wall. It can be secured on the wall with the help of four screws.

6 Unbox Pegasus NX

Pegasus™ NX comes in a state-of-art, modern, stylish, highly compact packaging made up of premium quality and durable material.

8.1. How to Unbox Pegasus NX?

To unbox Pegasus NX

1. Open the box as per the instructions provided in **Figure 6.1**.

Figure 6.1

The contents of the package are displayed as shown in **Figure 6.2**.

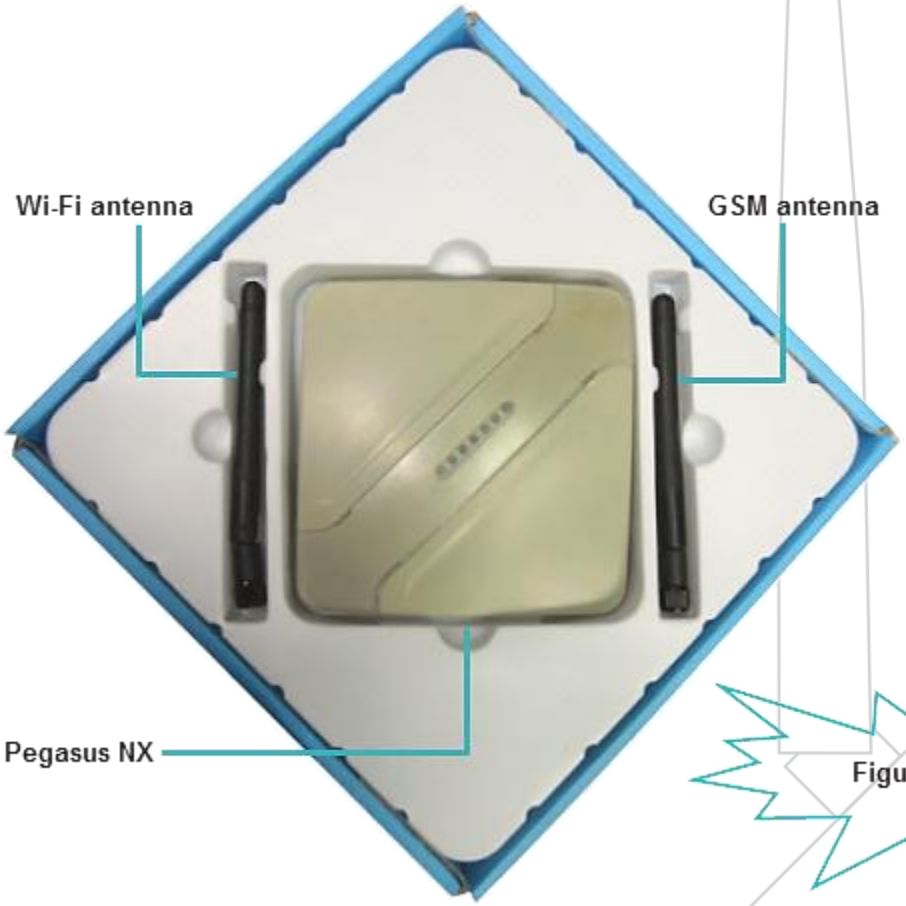


Figure 6.2

The contents of the box depend on the type of module. The below table explains the availability of components in various modules.

Pegasus NX Modules ⇨ / **Components** ⇩	GPRS	Ethernet	Wi-Fi	GPRS + Ethernet	GPRS + Ethernet + Wi-Fi
Wi-Fi Antenna	✘	✘	✔	✘	✔
GSM Antenna	✔	✘	✘	✔	✔
RJ45 Ethernet Port	✘	✔	✘	✔	✔

7 Install Battery

Pegasus™ NX comes with one 3.7V, 2000mAh, lithium polymer battery. The battery supplies power to the device in absence of the main power supply.

7.1. How to Install Battery?

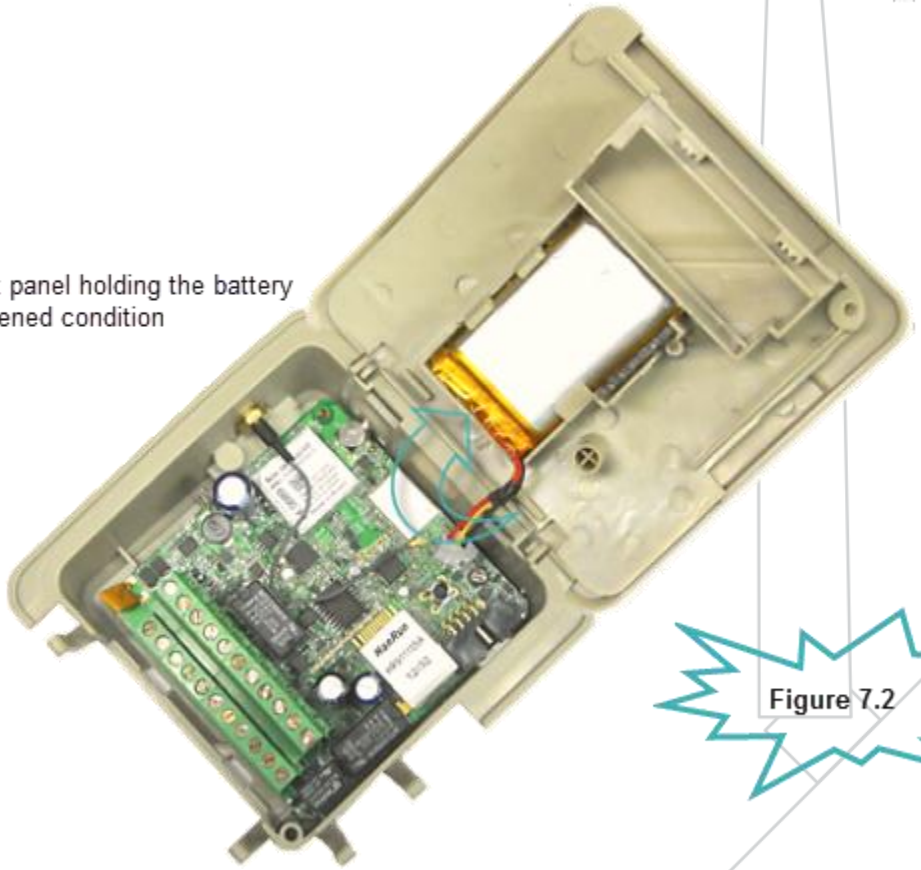
To install battery

1. Open the **Front Cover** as shown in **Figure 7.1**.

Front cover in opened condition

Figure 7.1

2. Open the **Front Panel** as shown in **Figure 7.2**.



Front panel holding the battery in opened condition

Figure 7.2

> **Caution:**
> Open the four locks of the front panel properly and gently. Using improper ways and applying too much force might break the front panel locks.

3. Gently, connect the female battery connector to the onboard male battery connector as shown in **Figure 7.3**.

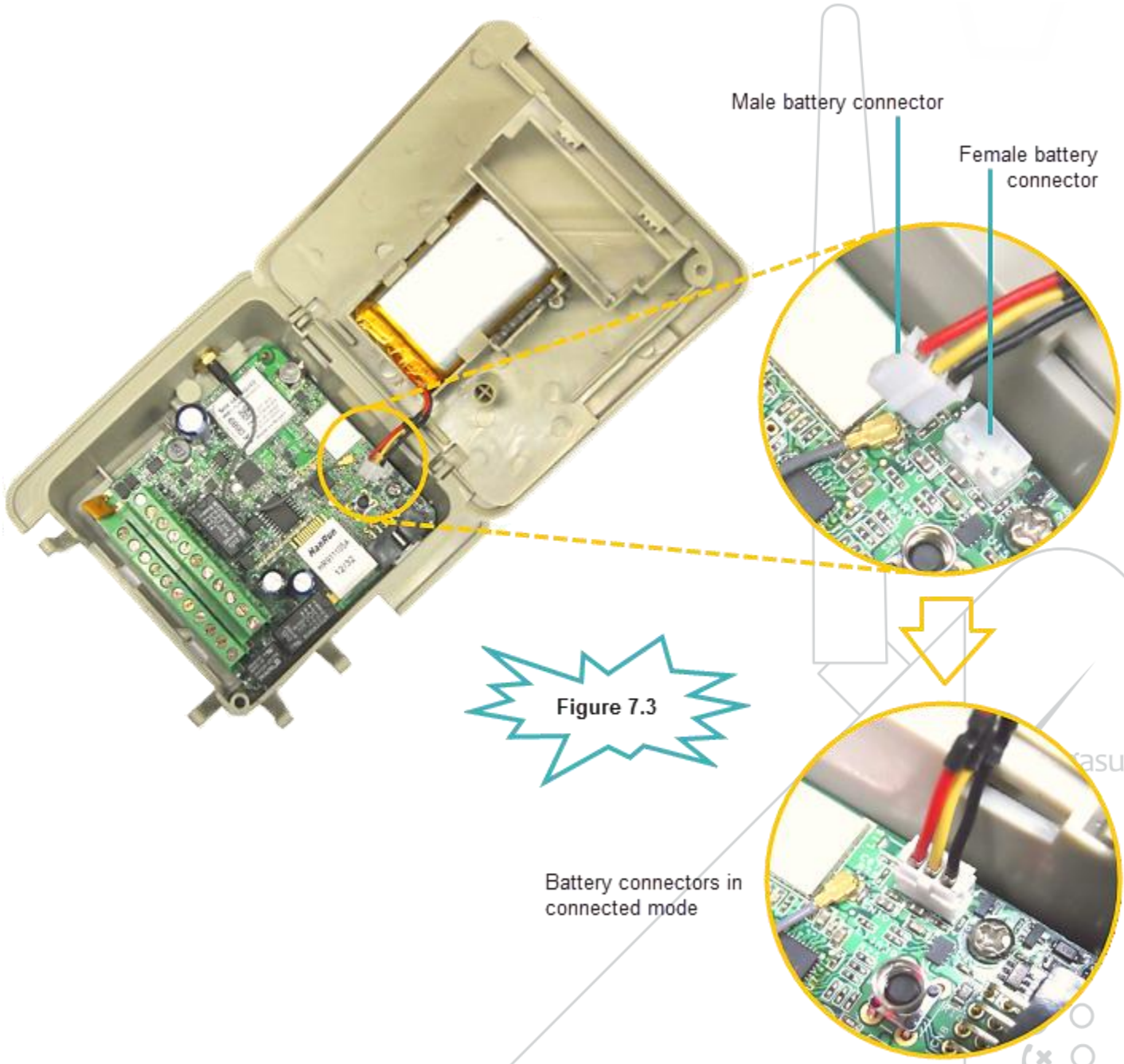


Figure 7.3

4. Close the **Front Panel** by placing the front panel locks on the back panel holes meant to hold the locks and apply a uniform gentle force.
5. Close the **Front Cover**.

8 Install Antennas

Pegasus™ NX is built-in two SMA connectors that can hold Wi-Fi and GSM antennas. Once secured properly, these Wi-Fi and GSM antennas offers wireless communication capabilities to report system events/occurrences to the monitoring station.

Note:

This section is intended for Pegasus™ NX GSM/GPRS and/or Wi-Fi modules. For modules not using GSM/GPRS and/or Wi-Fi, please skip this section.

8.1. Requirements

Materials	RP-SMA Wi-Fi Antenna	SMA GSM Antenna
	Available in the box, comes with the Pegasus™ NX Wi-Fi modules package. 	Available in the box, comes with the Pegasus™ NX GSM/GPRS modules package. 

8.2. How to Install the Wi-Fi and GSM Antennas?

To install the Wi-Fi and GSM antennas

1. Fix the Wi-Fi and GSM antennas on the respective SMA connectors using a screw type coupling mechanism in the clockwise direction as shown in Figure 8.1.

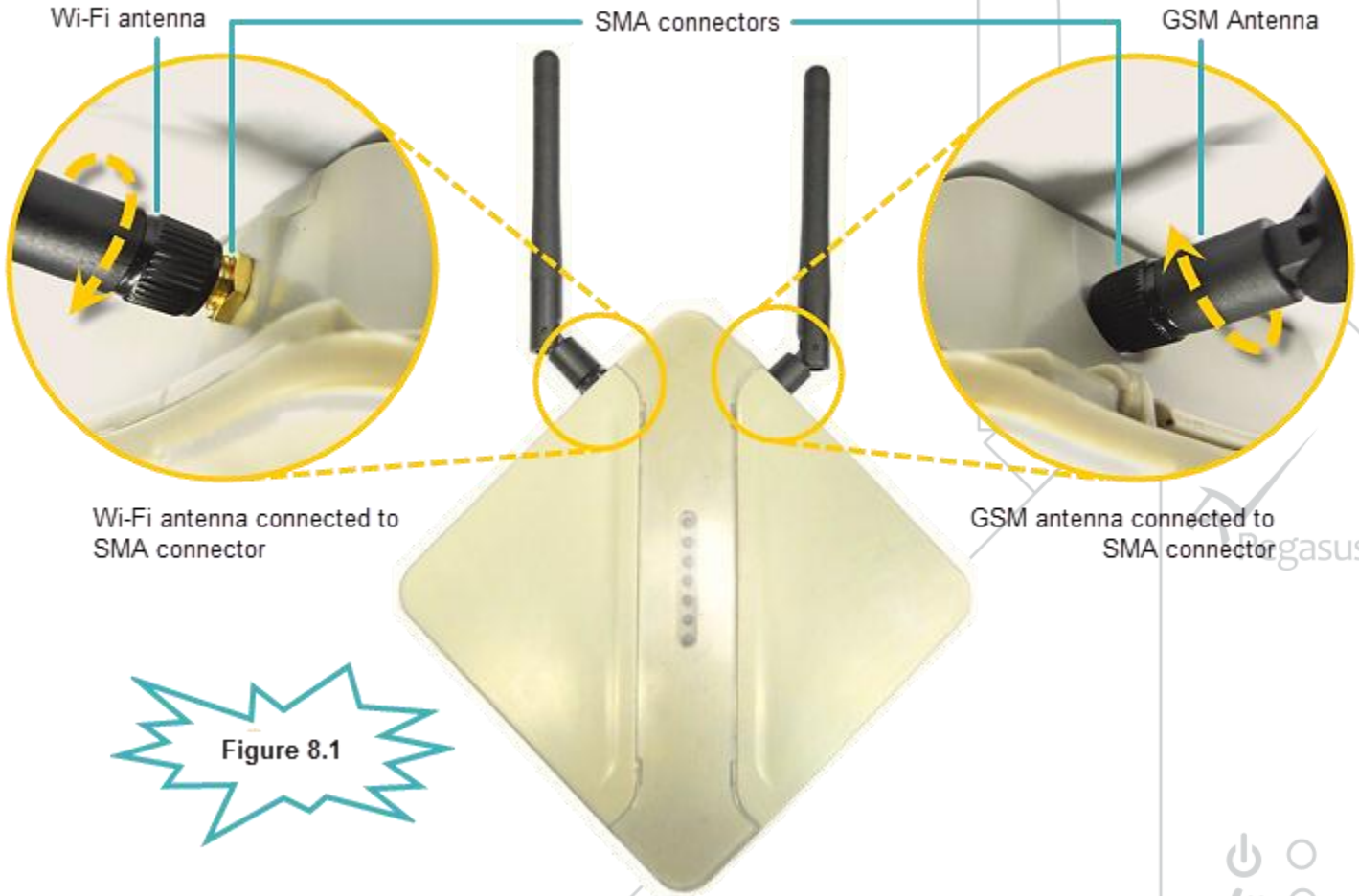


Figure 8.1

9 Install SIM Cards

Pegasus™ NX is built-in a SIM cardholder that can accommodate two GSM SIM cards. Once secured properly, these SIM cards offers wireless communication capabilities to report system events/occurrences to the monitoring station. The device supports standard GSM SIM cards (2G).

Note:

This section is intended for Pegasus™ NX GSM/GPRS modules. For modules not using GSM/GPRS, please skip this section.

Important:

Before installing SIM cards:

- Activate your SIM cards. In order to activate your SIM card, please contact your local GSM service provider;
- Activate GPRS. In order to activate GPRS, please contact your local GSM service provider. Always go for an unlimited GPRS plan;
- Disable the Personal Identification Number (PIN).

9.1. Requirements

Materials	○ Two GSM 2G SIM cards (Not the part of Pegasus™ NX package)
	○ One screwdriver to tighten or loosen 3mm star-shaped screw.

9.2. How to Install SIM Cards?

To install SIM cards

1. Using the star-shaped screwdriver, loosen the 3mm screw securing the SIM card cover in anti-clockwise direction as shown in **Figure 9.1**, remove and place it in a secure place.

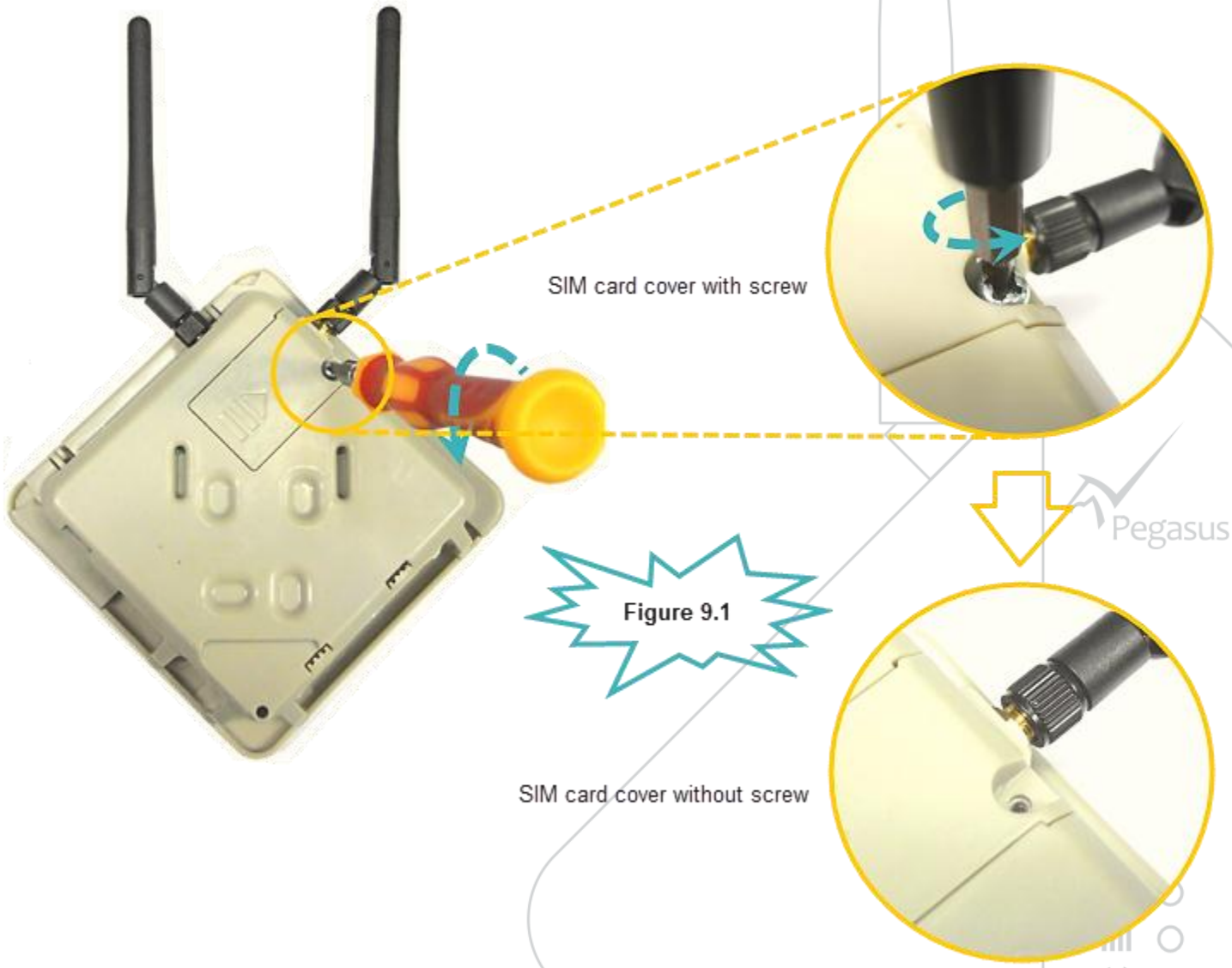


Figure 9.1

2. Drag the SIM card cover in horizontally outward direction, and then lift it in the upward direction to open it as shown in **Figure 9.2**.

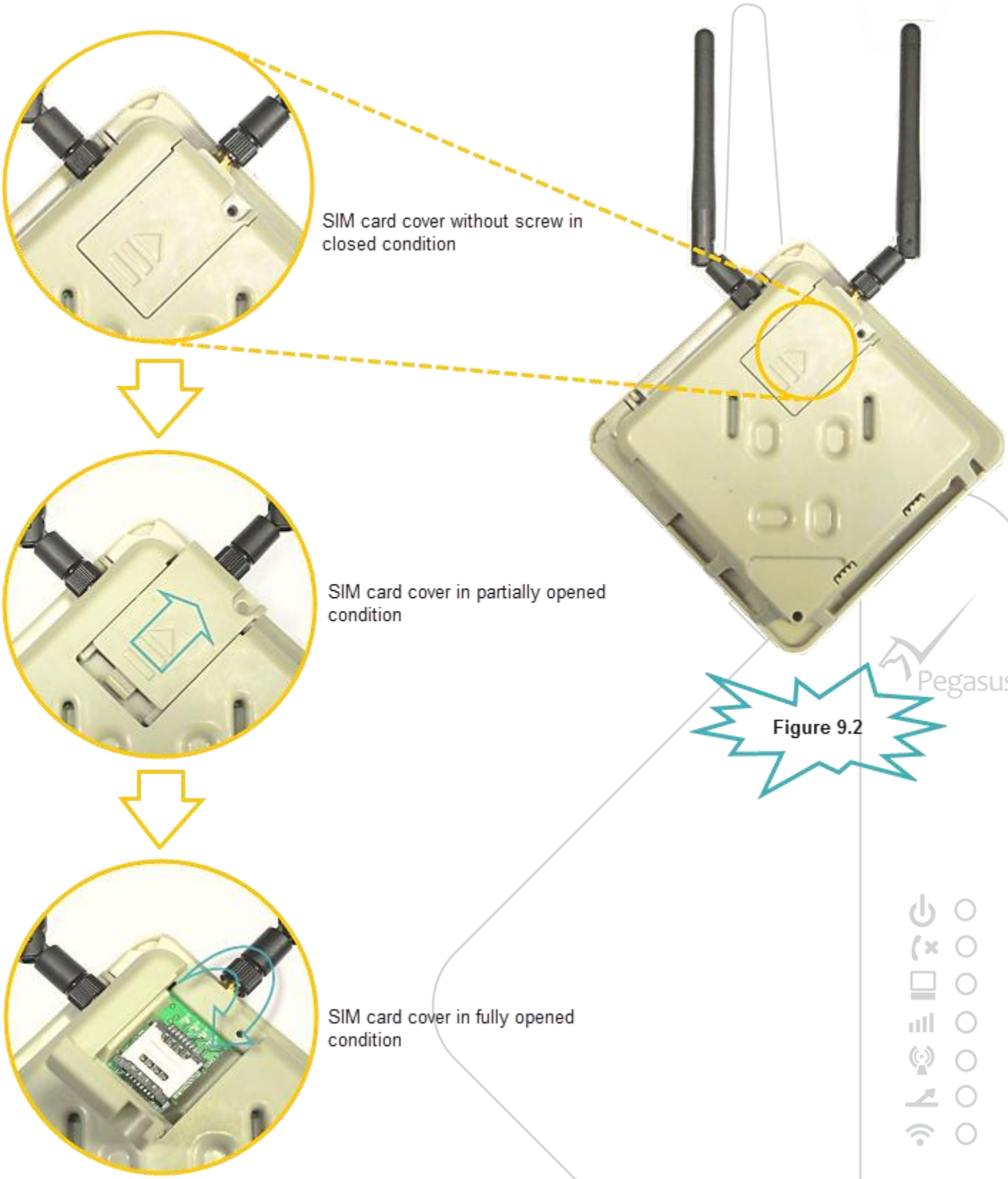


Figure 9.2

3. Insert SIM card 1 in the lower SIM cardholder as shown in **Figure 9.3**.

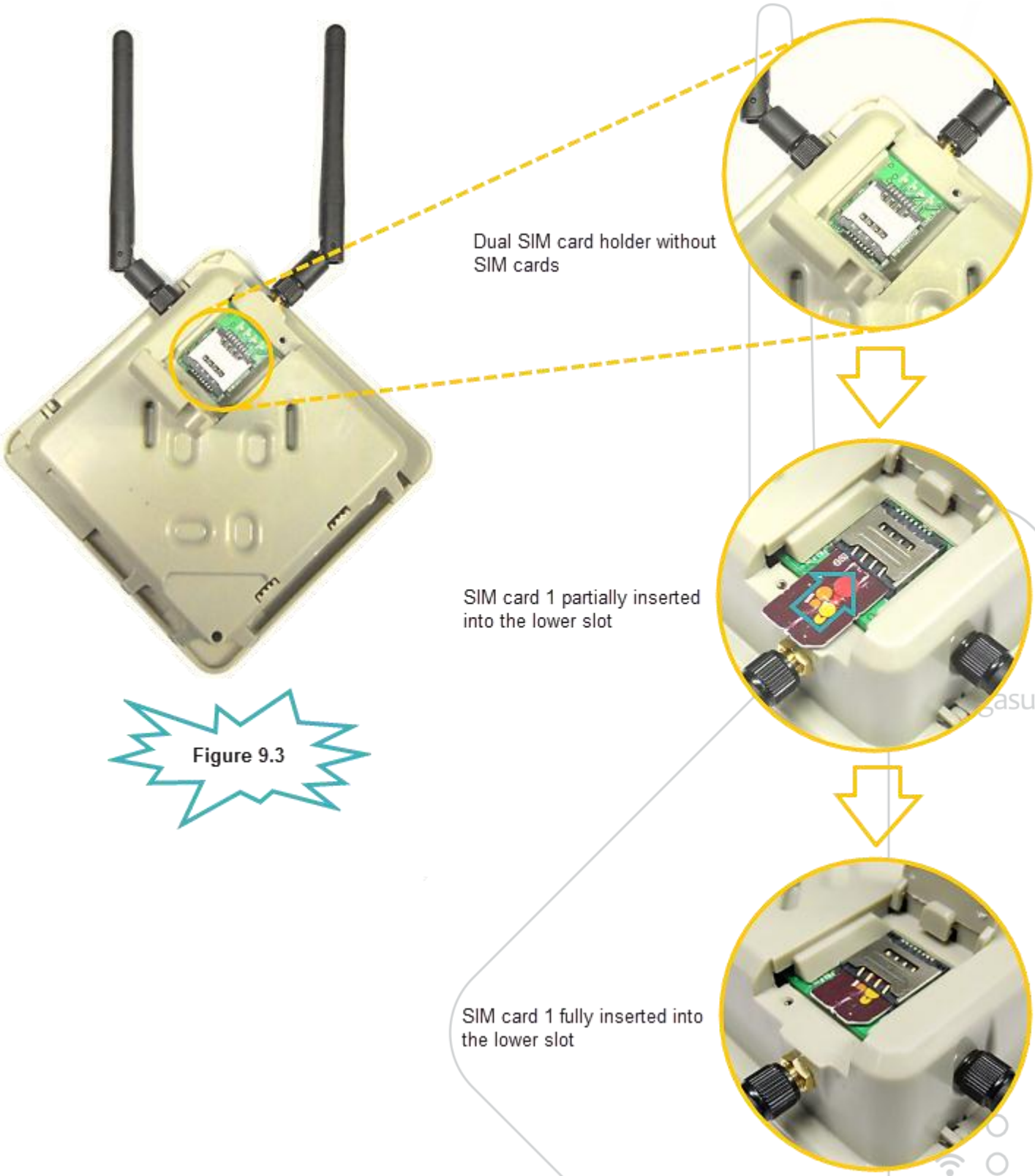


Figure 9.3

4. Insert SIM card 2 in the upper SIM cardholder as shown in Figure 9.4.

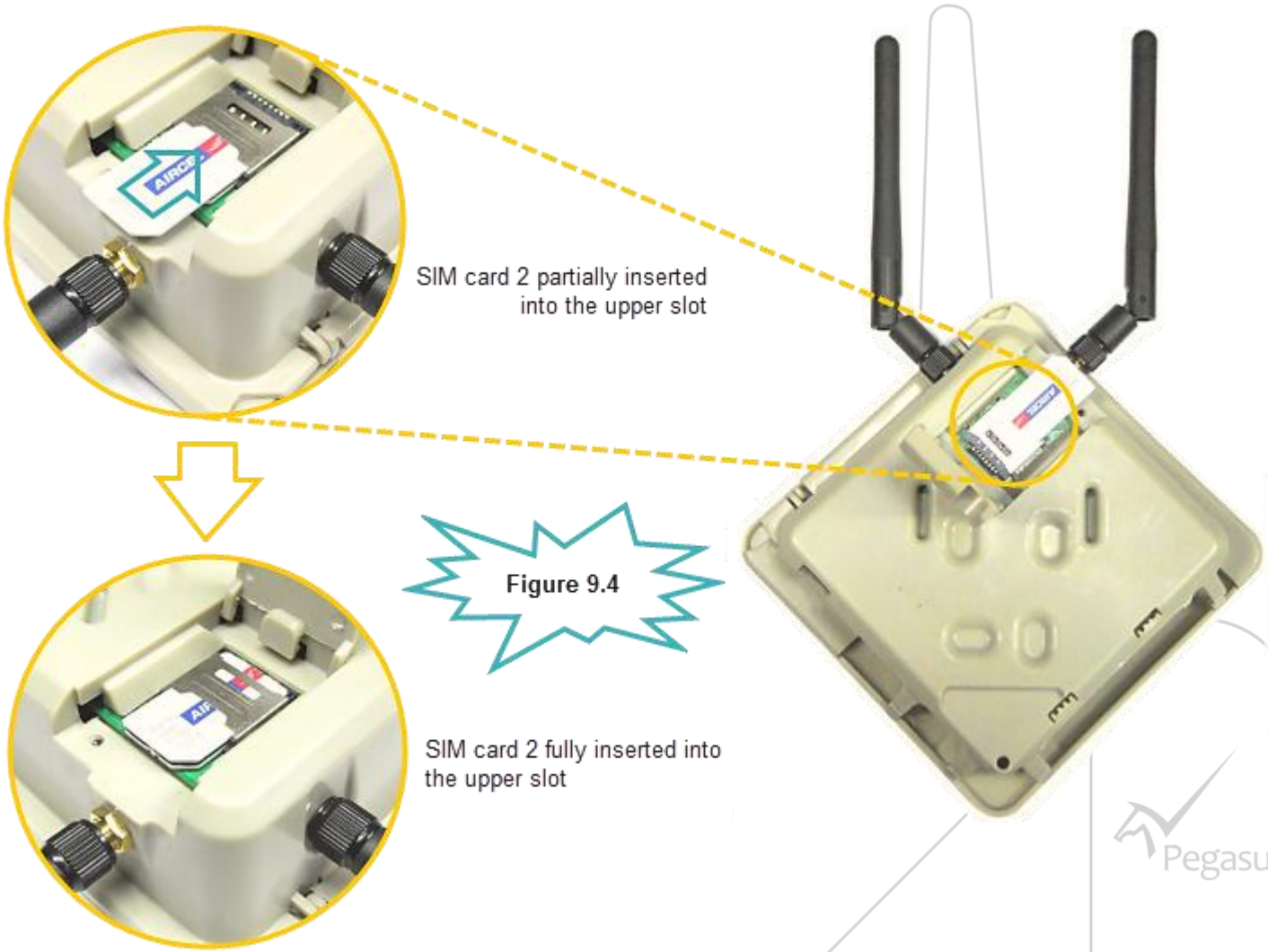


Figure 9.4

5. Close the SIM card cover. Using the star-shaped screwdriver, tighten the 3mm screw to secure the SIM card cover in clockwise direction.

Caution:

DO NOT over tight the screw as it might damage the thread.

10 How to Mount Pegasus NX?

10.1. Mounting Instructions

Caution:

To mount Pegasus™ NX and make sure it stays on the wall, use a proper mounting kit for the job. Just remember, the anchors need to hold five times the weight of what you're putting on the mount.

10.2. Requirements

Materials	Wall bracket	Nylon anchor plugs
	Four Screws	
Tools	Drill and drill bits (masonry and steel if necessary)	Stud finder (needed for non-masonry walls)
	Screw driver	

10.3. Mount Bracket on a Masonry Wall

Search an appropriate and secure place to fix the wall-mounting bracket.

To mount bracket on a masonry wall

1. Position the wall bracket on the wall and mark out the mounting holes, see **Figure 10.1**.

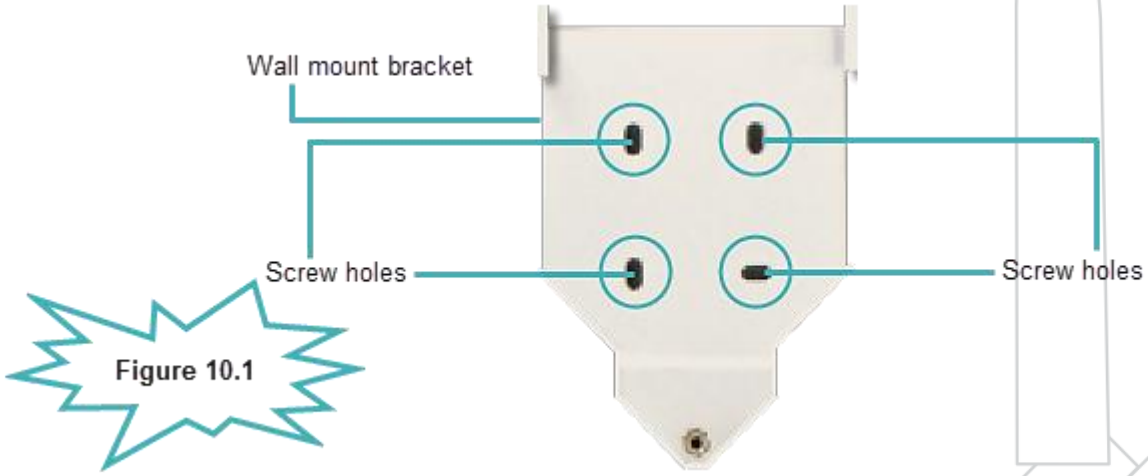


Figure 10.1

2. Next drill the mounting holes with masonry drill bit, and then insert the nylon anchor plugs in the mounting holes.
3. Secure the wall bracket by screwing the coach screws in the clockwise direction into the wall using a screwdriver, see **Figure 10.2**.

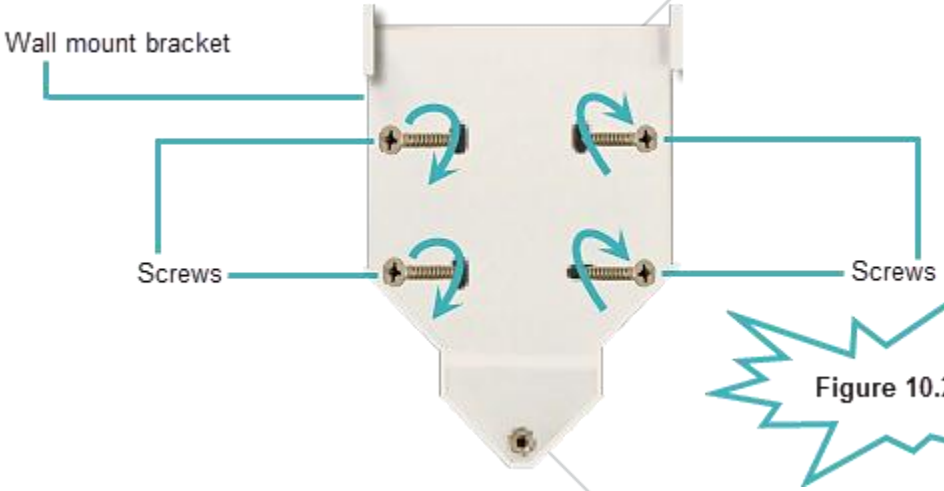


Figure 10.2

A fully secured wall bracket looks straight, see **Figure 10.3**.

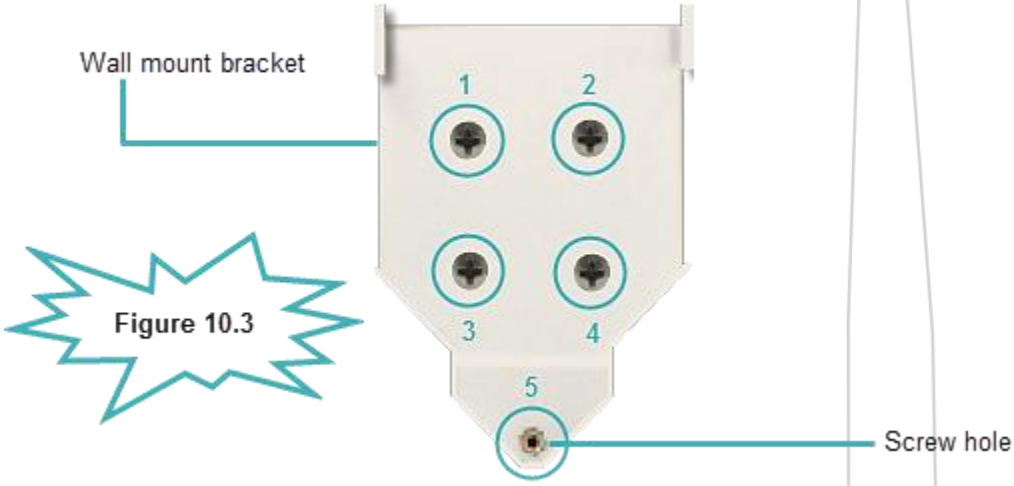


Figure 10.3

10.4. Fix Pegasus™ NX on the Wall Bracket

Once the wall bracket is properly fixed on the wall, straight fix the device to the wall bracket and follow the instructions provided.

To fix the device on the wall bracket

1. Place the backside of the device on the wall mount bracket according to the numbering as demonstrated in **Figure 10.4a and Figure 10.4b.**

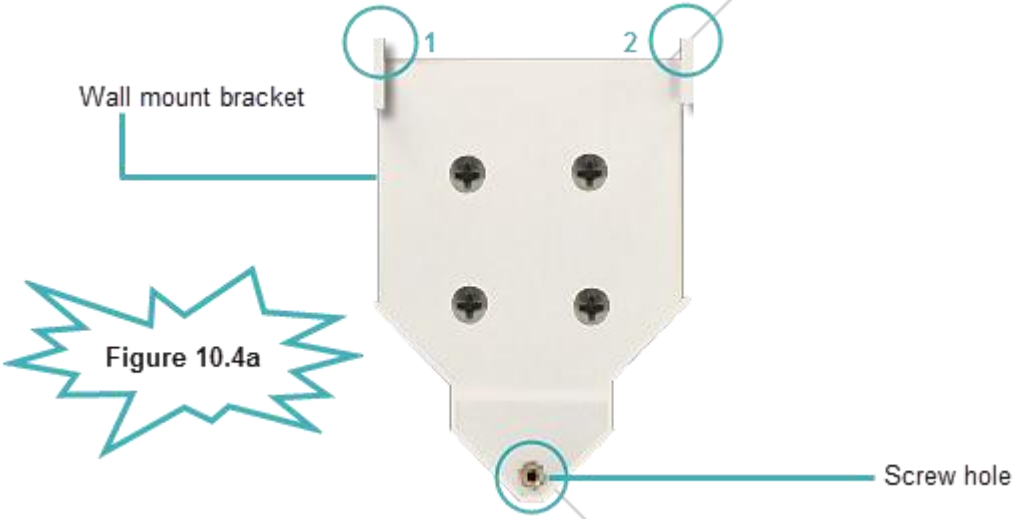


Figure 10.4a

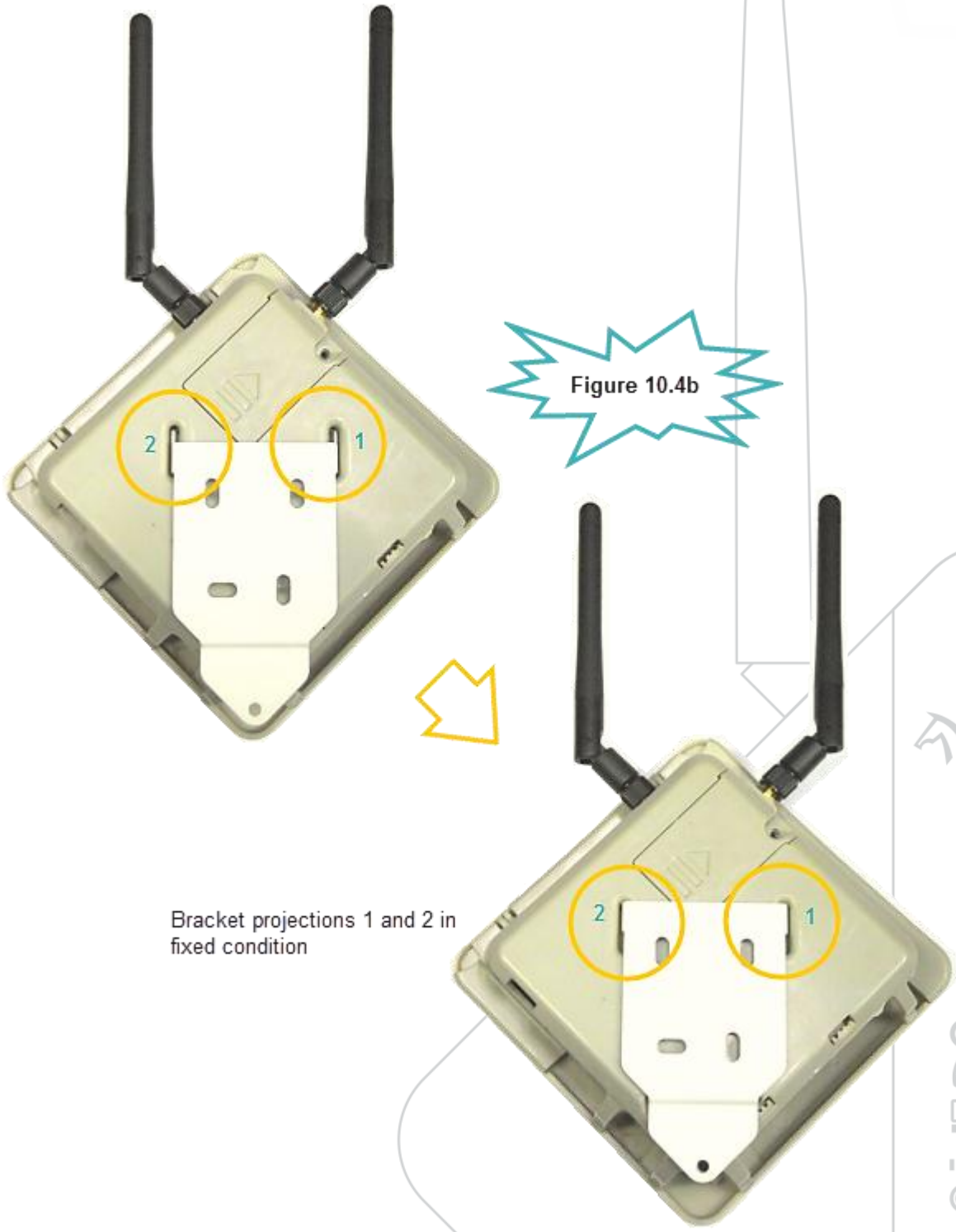


Figure 10.4b

Bracket projections 1 and 2 in fixed condition

2. Once the device is properly placed on the wall bracket at position 1 and 2, using a screwdriver, secure it by fastening the long screw in the clockwise direction into the screw hole at position 3 as demonstrated in **Figure 10.5**.

Figure 10.5

3. Once the device is properly fixed on the wall-mounted bracket, it looks straight and stable on the wall as demonstrated in **Figure 10.6**.

   In case it is in the tilted condition, simply adjust the wall bracket by slightly losing the four screws, as the wall bracket is built-in adjustable screw holes.

Figure 10.6

11 Connect Ethernet Cable to RJ45 Port

11.1. Connection Instructions

Important:

This section is intended for Pegasus™ NX Ethernet modules. For modules not using Ethernet, please skip this section.

Note:

ALWAYS connect the Ethernet cable to the Pegasus™ NX RJ45 port in a proper manner as improper way of connection might damage the Ethernet port.

ALWAYS use CAT5 MDI/MDI-X auto crossover cable.

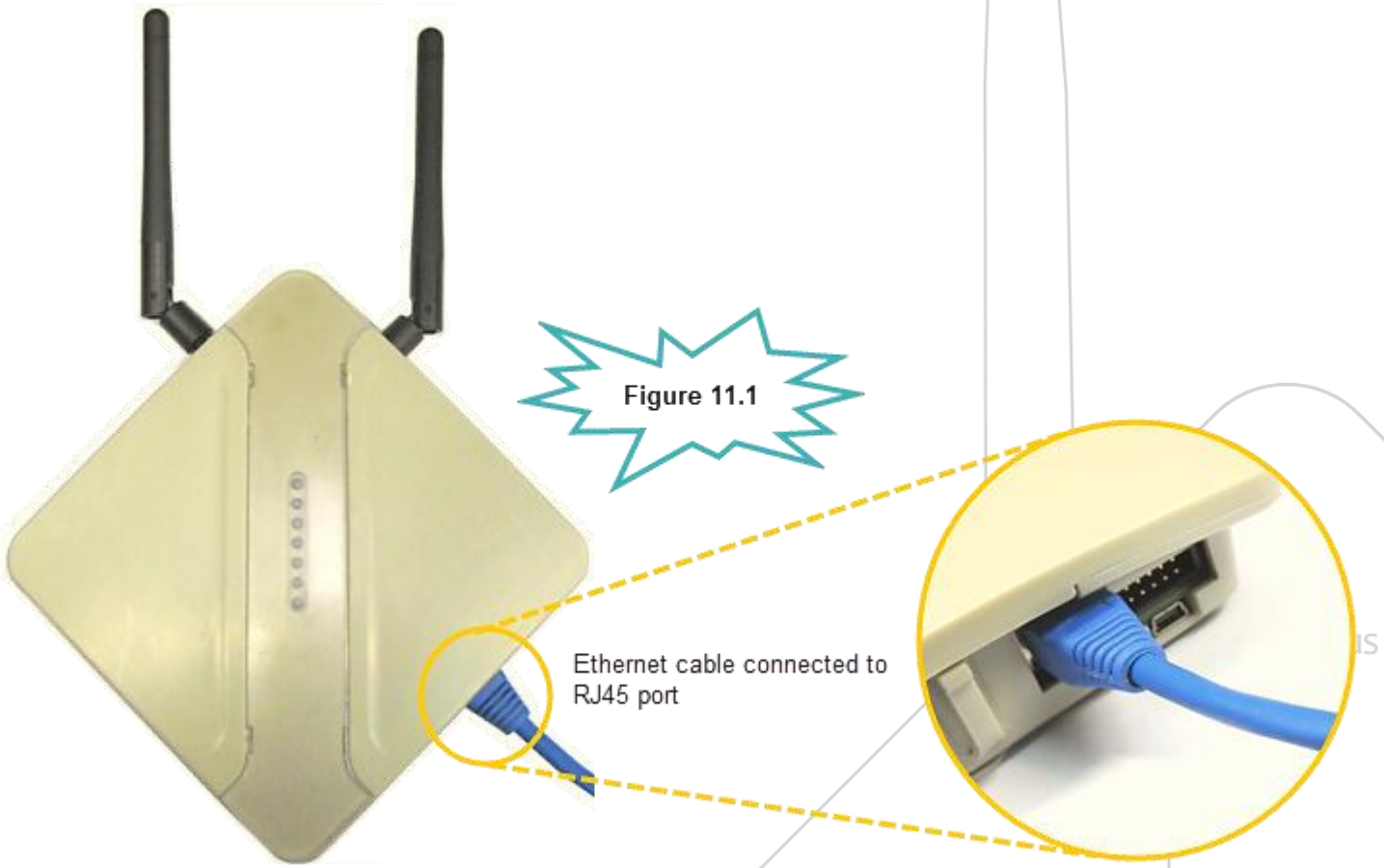
11.2. Requirements

Materials	RJ45 Ethernet cable (Not provided with the Pegasus™ NX package)

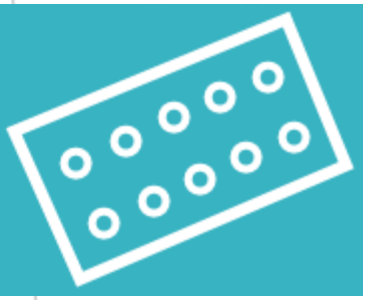
11.3. How to Connect Serial RS-232 Cable to UART Port?

To connect serial RS-232 cable to UART port

1. Connect the serial RS-232 cable to the UART port exactly as demonstrated in **Figure 11.1**.



12 Connect Serial RS-232 Cable to UART Port



The UART port helps in configuration and firmware update and thus allows the device to function accurately by fixing bugs that were present in the previous version. It also adds new features and updates.

Using the UART port, you can view debug messages.

12.1. Connection Instructions

Important:

This section is intended for connections related to configuration and firmware upgrade, and to view debug messages.

Caution:

ALWAYS connect the serial RS-232 cable to the Pegasus™ NX serial port in a proper manner as an improper way of connection might damage the pins of the serial port.

12.2. Requirements

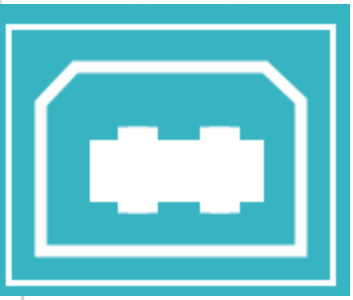
Materials	Serial RS-232 cable (Not provided with the Pegasus™ NX package)

12.3. How to Connect Serial RS-232 Cable to UART Port?

To connect serial RS-232 cable to UART port

1. Connect the serial RS-232 cable to the UART port exactly as demonstrated in **Figure 12.1**.

13 Connect USB B Cable to USB B Port



The mini USB B port helps in configuration and firmware update and thus allows the device to function accurately by fixing bugs that were present in the previous version. It also adds new features and updates.

Using the mini USB B port, you can view debug messages.

13.1. Connection Instructions

Important:

This section is intended for connections related to configuration and firmware upgrade, and to view debug messages.

Caution:

ALWAYS connect the mini USB B cable to the Pegasus™ NX USB B port in a proper manner as an improper way of connection might damage the USB B port.

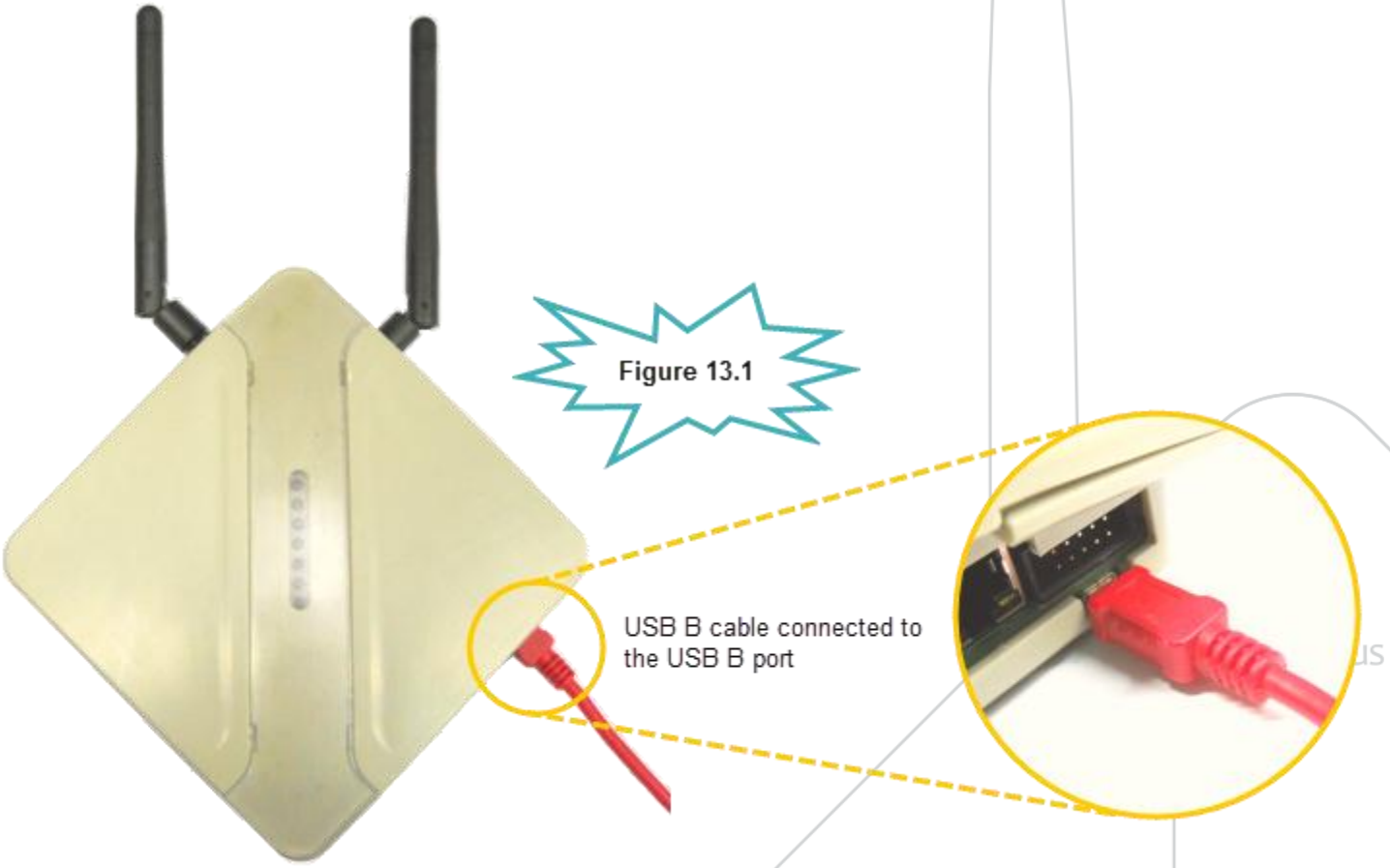
13.2. Requirements

Materials	Mini USB B to USB A cable (Not provided with the Pegasus™ NX package)

13.3. How to Connect Serial RS-232 Cable to UART Port?

To connect mini USB B cable to the Pegasus™ NX USB B port

1. Connect the mini USB B cable to the Pegasus™ NX USB B port exactly as demonstrated in **Figure 12.1**.



14 How to Connect Pegasus NX?

14.1. Wiring Instructions

Warning:

Wiring should be done by the trained 3i-Corporation authorized service personnel only.

Never install the device during lightning or storm.

Always use genuine 3i-Corporation approved accessories with the device.

Turn OFF power supply during wiring.

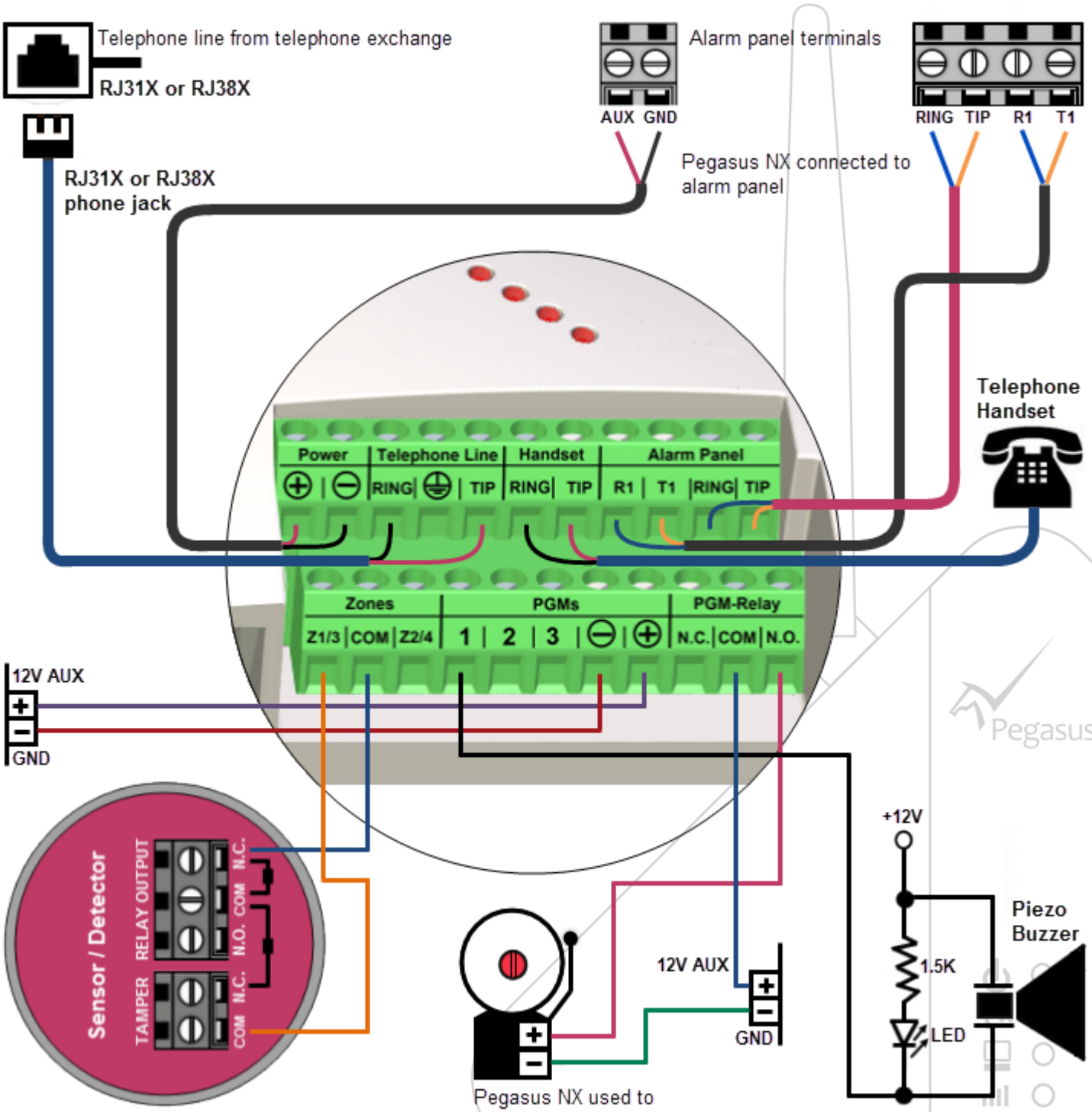
14.2. Wiring Example

Pegasus™ NX is built in four terminals: **R1**, **T1**, **RING** and **TIP** for alarm panel connections. These are fully compatible with any alarm panel that follows Contact ID Protocol.

Telephone Line and **Handset** terminals that can be used to connect wires from telephone exchange and telephone handset respectively. Use the RJ31X or RJ38X phone jack for connection.

The **programmable SPDT relay output** can be used for various crucial operations. For example, switching a high current powered bell or siren.

Three programmable open collector outputs can be used to activate a buzzer or strobe light, open or close doors etc. When any of the three on board programmable open collector outputs is activated, Pegasus™ NX triggers any device connected to it.



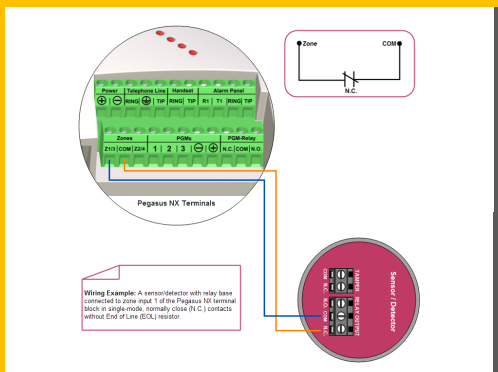
A sensor/detector with relay base connected to zone input 1/3 of the Pegasus NX terminal block in single-mode, N.C. contacts with EOL resistor with tamper & wire fault recognition.

Pegasus NX used to switch a high current powered bell or siren.

A buzzer connected to the programmable open collector (O.C.) output 1 of the Pegasus NX terminals. External power supply (12V) is also provided.

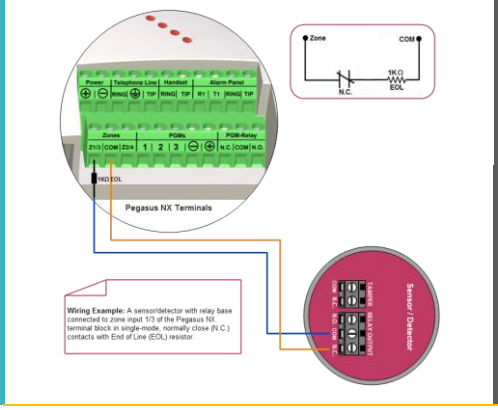
15 How to Wire Sensors/Detectors to Pegasus NX?

Pegasus™ NX is built-in two zones which are extended to four zone inputs. Pegasus™ NX supports zone input wiring in both single-mode and double-mode. A sensor or detector can be connected in nine different ways. The below table shows the different types of sensor or detector connections.



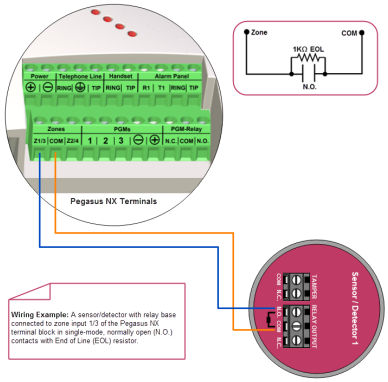
Single-Mode: Normally Close (N.C.) Contacts without End of Line (EOL) Resistor

To view the full sensor or detector wiring, click here



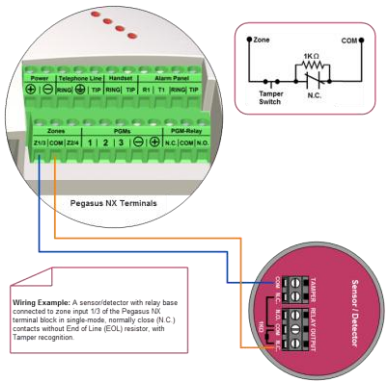
Single-Mode: Normally Close (N.C.) Contacts with End of Line (EOL) Resistor

To view the full sensor or detector wiring, click here



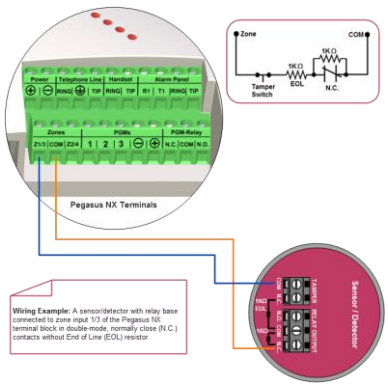
Single-Mode: Normally Open (N.O.) Contacts with End of Line (EOL) Resistor

To view the full sensor or detector wiring, click here



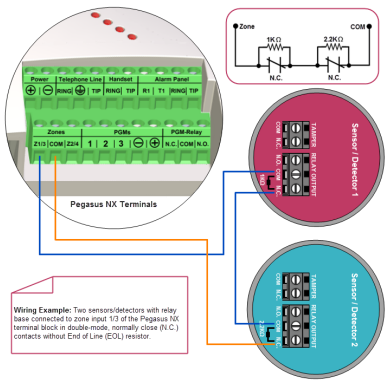
Single-Mode: Normally Close (N.C.) Contacts without End of Line (EOL) Resistor, with Tamper Recognition

To view the full sensor or detector wiring, click here



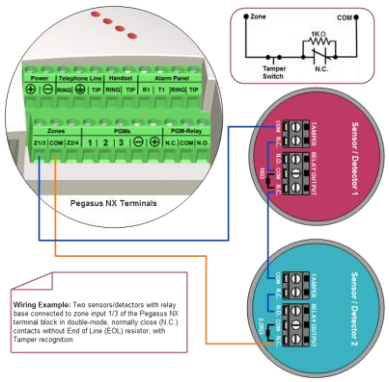
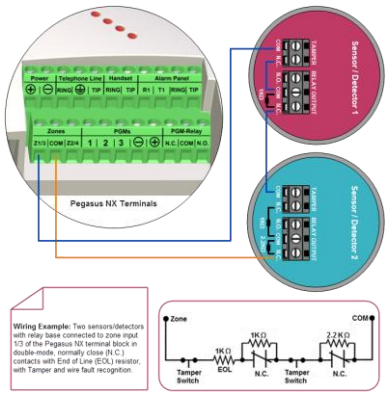
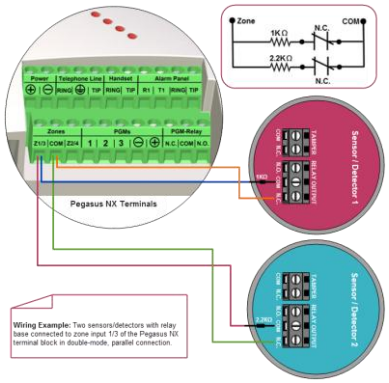
Single-Mode: Normally Close (N.C.) Contact With End of Line (EOL) Resistor, with Tamper & Wire Fault Recognition

To view the full sensor or detector wiring, click here



Double-Mode: Normally Close (N.C.) Contacts without End of Line (EOL) Resistor

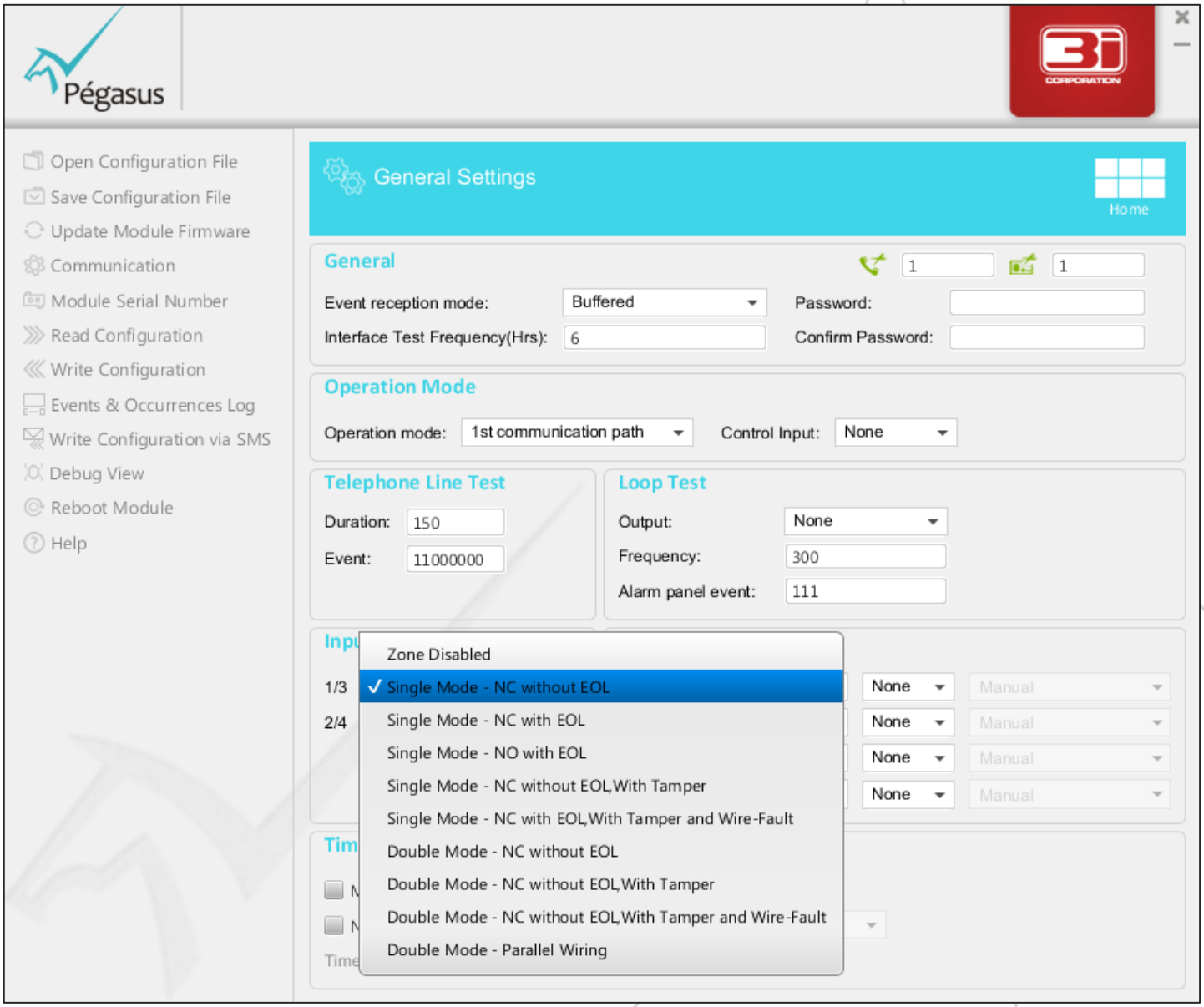
To view the full sensor or detector wiring, click here

	**Double-Mode: Normally Close (N.C.) Contacts without End of Line (EOL) Resistor, with Tamper Recognition** To view the full sensor or detector wiring, click here
	**Double-Mode: Normally Close (N.C.) Contacts with End Of Line (EOL) Resistor, with Tamper & Wire Fault Recognition** To view the full sensor or detector wiring, click here
	**Double-Mode: Parallel Connection** To view the full sensor or detector wiring, click here

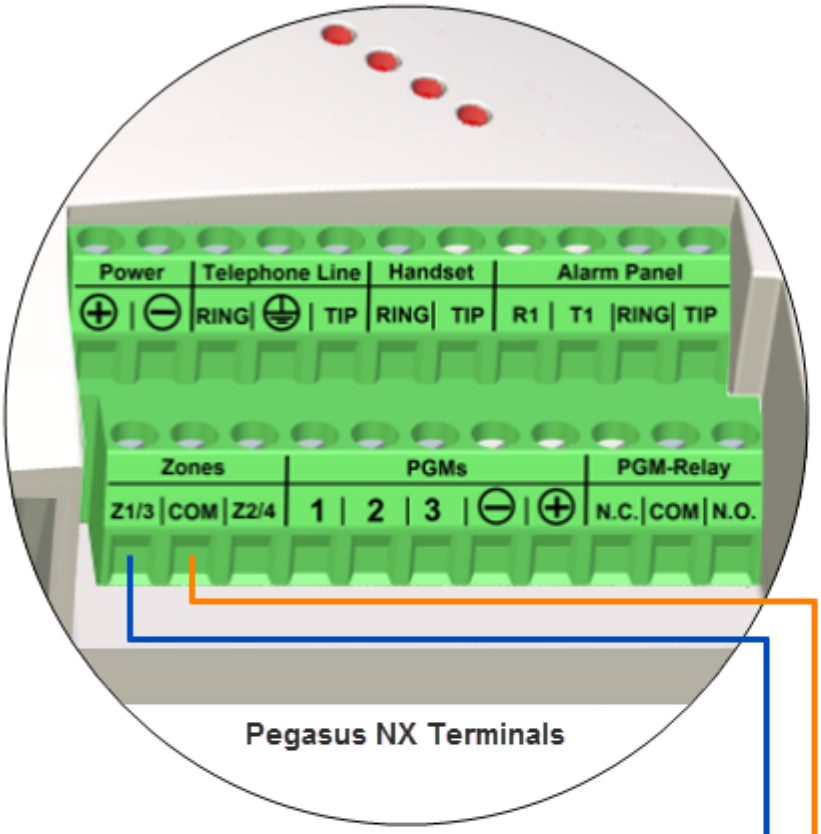
Once sensor(s) or detector(s) is/are connected by using any connection mentioned in the above table, selecting the same connection type in Pegasus™ Studio is required.

For Example:

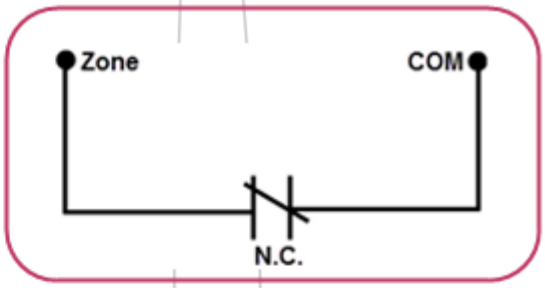
Two sensors are connected to Pegasus™ NX in Double-Mode: Parallel Connection. In Pegasus™ Studio, under General **Settings > Input**, select **Double Mode – Parallel Wiring**.

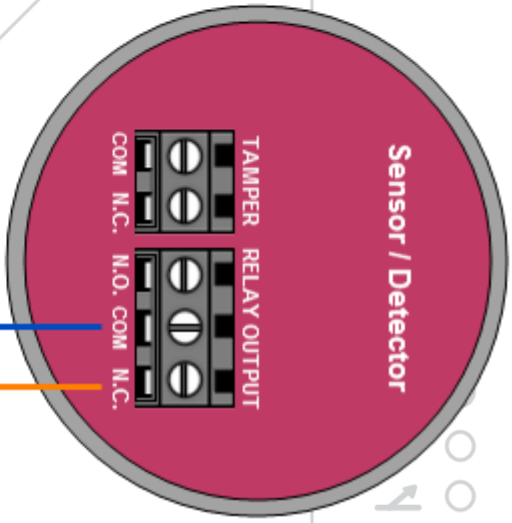

Pégasus
Open Configuration File
Save Configuration File
Update Module Firmware
Communication
Module Serial Number
Read Configuration
Write Configuration
Events & Occurrences Log
Write Configuration via SMS
Debug View
Reboot Module
Help
General Settings
Home
General
Event reception mode:
Buffered
Password:
Interface Test Frequency(Hrs):
6
Confirm Password:
Operation Mode
Operation mode:
1st communication path
Control Input:
None
Telephone Line Test
Duration:
150
Event:
11000000
Loop Test
Output:
None
Frequency:
300
Alarm panel event:
111
Zone Disabled
Single Mode - NC without EOL
Single Mode - NC with EOL
Single Mode - NO with EOL
Single Mode - NC without EOL,With Tamper
Single Mode - NC with EOL,With Tamper and Wire-Fault
Double Mode - NC without EOL
Double Mode - NC without EOL,With Tamper
Double Mode - NC without EOL,With Tamper and Wire-Fault
Double Mode - Parallel Wiring
1/3
2/4
None
Manual

15.1. Single-Mode: Normally Close (N.C.) Contacts without End of Line (EOL) Resistor



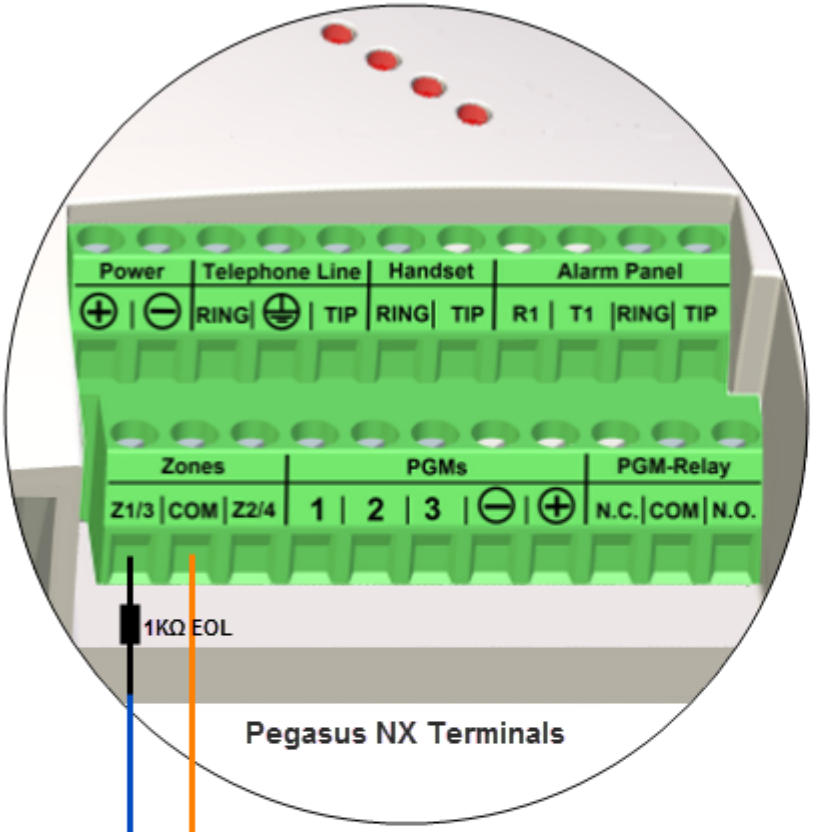
Pegasus NX Terminals



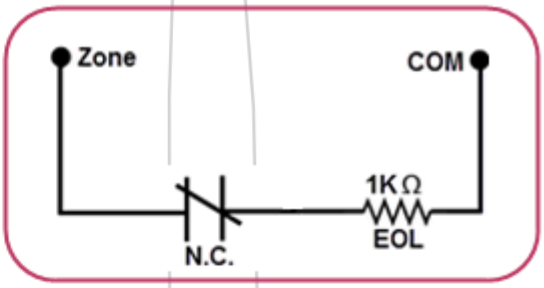


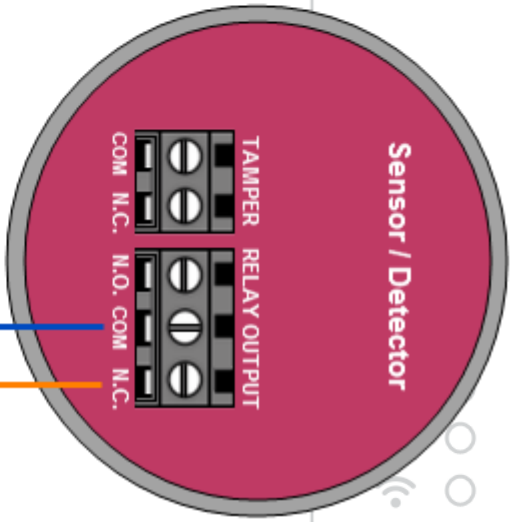
Wiring Example: A sensor/detector with relay base connected to zone input 1 of the Pegasus NX terminal block in single-mode, normally close (N.C.) contacts without End of Line (EOL) resistor.

15.2. Single-Mode: Normally Close (N.C.) Contacts with End of Line (EOL) Resistor



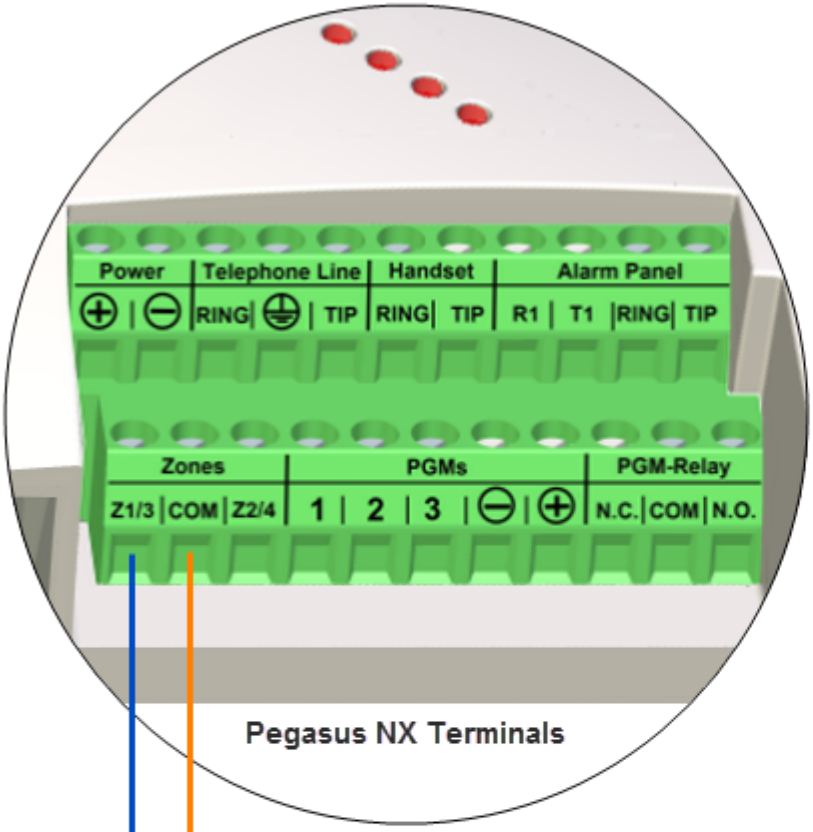
Pegasus NX Terminals



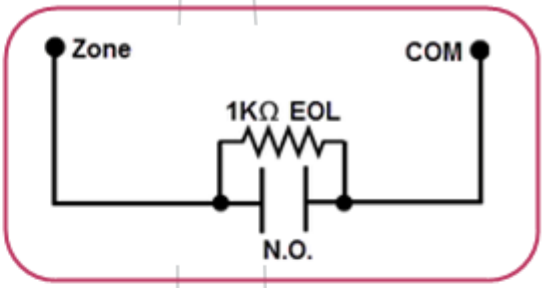


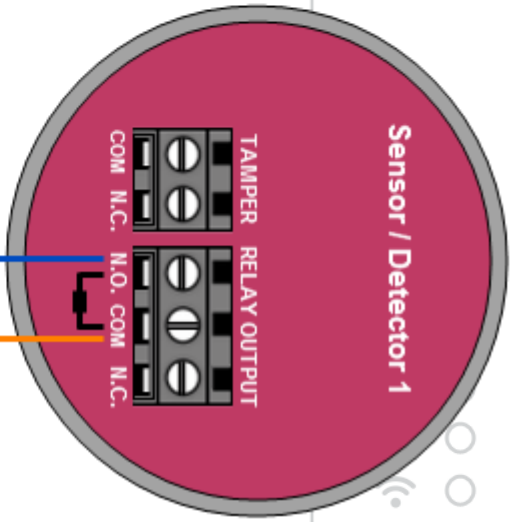
Wiring Example: A sensor/detector with relay base connected to zone input 1/3 of the Pegasus NX terminal block in single-mode, normally close (N.C.) contacts with End of Line (EOL) resistor.

15.3. Single-Mode: Normally Open (N.O.) Contacts with End of Line (EOL) Resistor



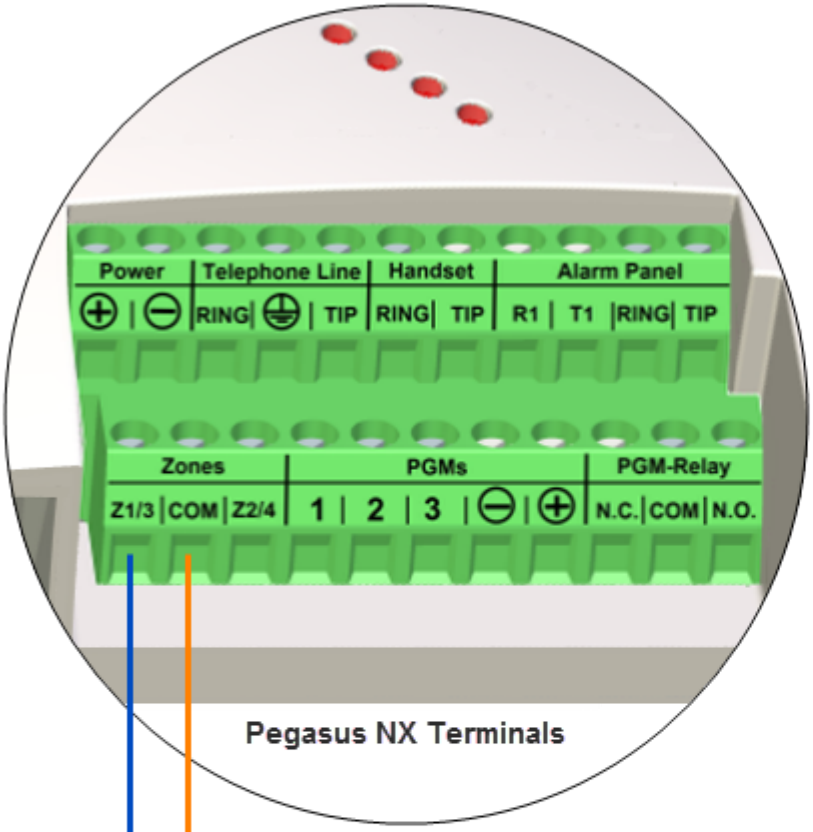
Pegasus NX Terminals



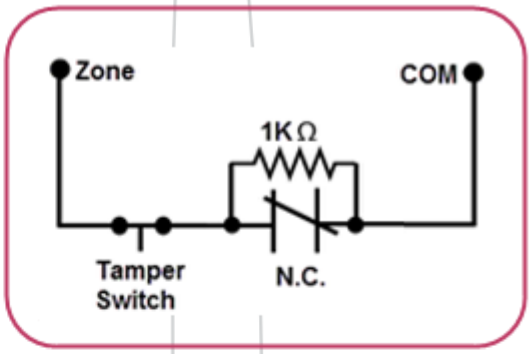


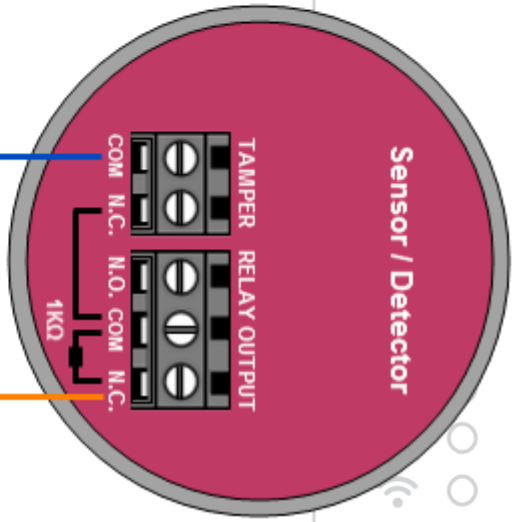
Wiring Example: A sensor/detector with relay base connected to zone input 1/3 of the Pegasus NX terminal block in single-mode, normally open (N.O.) contacts with End of Line (EOL) resistor.

15.4. Single-Mode: Normally Close (N.C.) Contacts without End of Line EOL Resistor, with Tamper Recognition



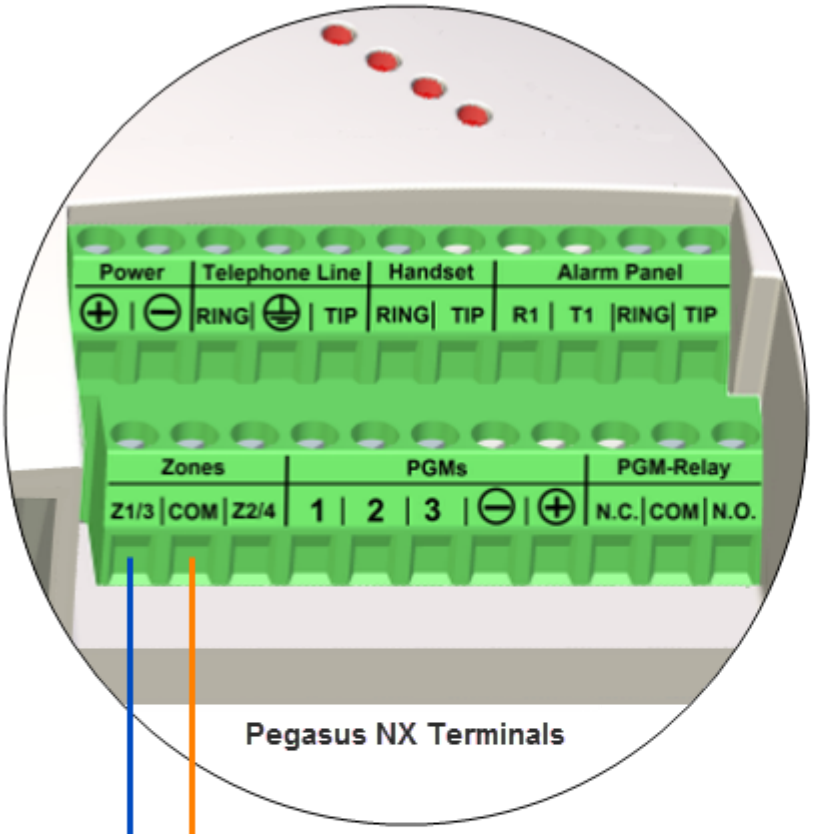
Pegasus NX Terminals



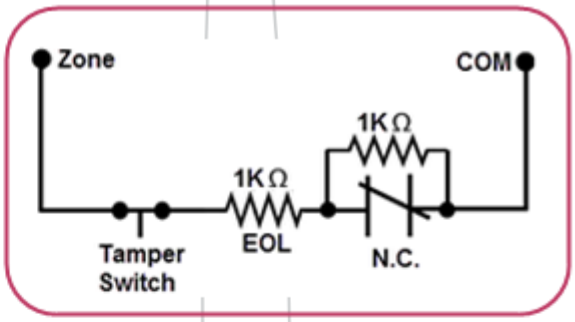


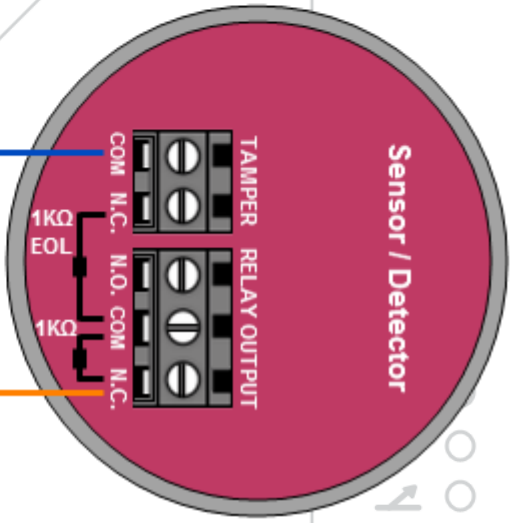
Wiring Example: A sensor/detector with relay base connected to zone input 1/3 of the Pegasus NX terminal block in single-mode, normally close (N.C.) contacts without End of Line (EOL) resistor, with Tamper recognition.

15.5. Single-Mode: Normally Close (N.C.) Contact with End of Line (EOL) Resistor, with Tamper & Wire Fault Recognition



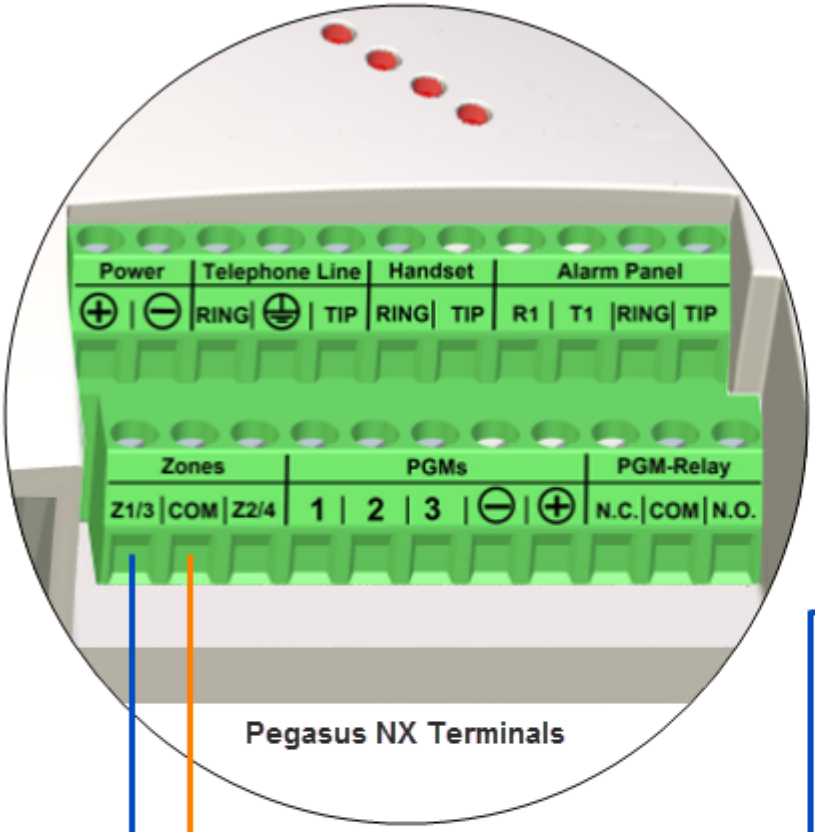
Pegasus NX Terminals



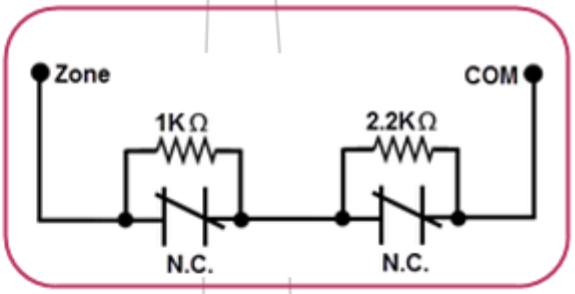


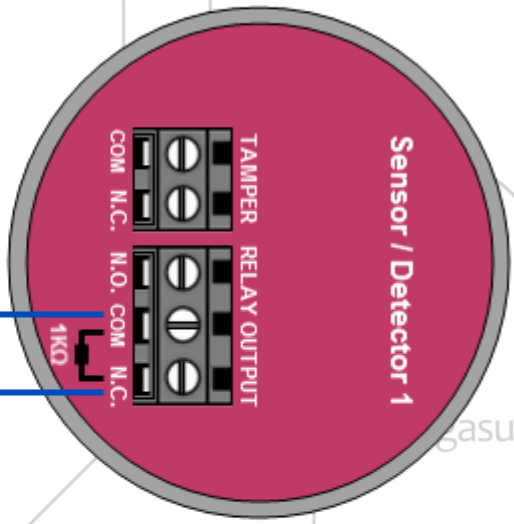
Wiring Example: A sensor/detector with relay base connected to zone input 1/3 of the Pegasus NX terminal block in single-mode, normally close (N.C.) contacts with End of Line (EOL) resistor with Tamper & wire fault recognition.

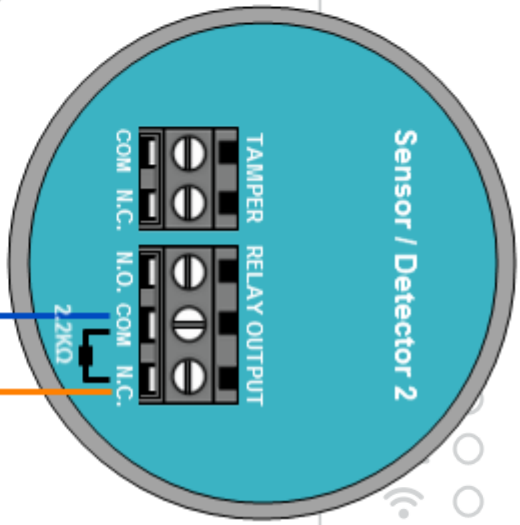
15.6. Double-Mode: Normally Close (N.C.) Contacts without End of Line (EOL) Resistor



Pegasus NX Terminals

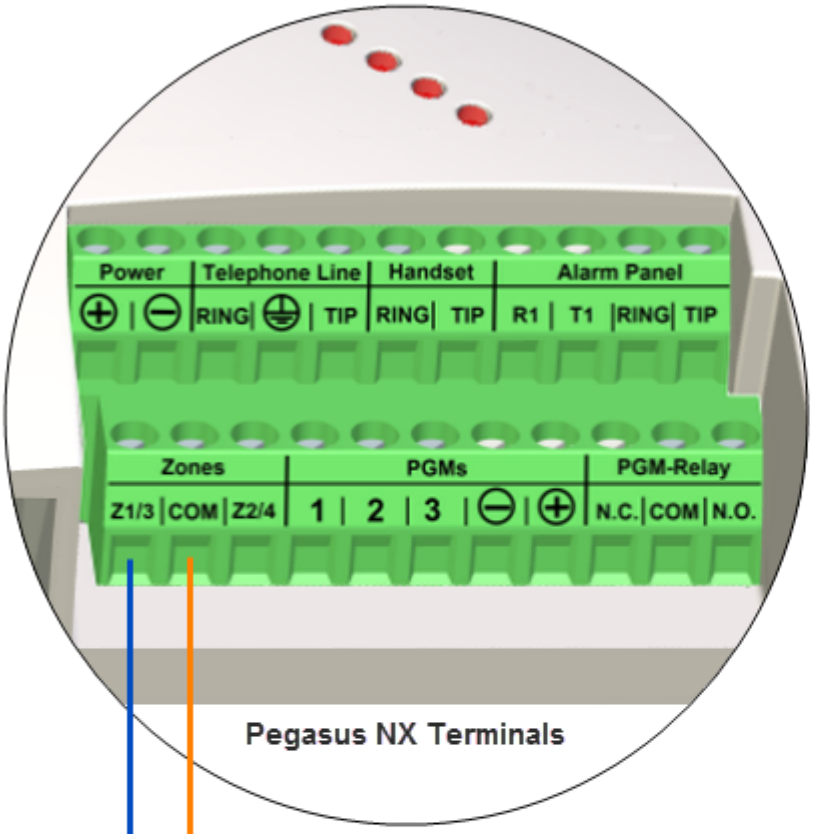




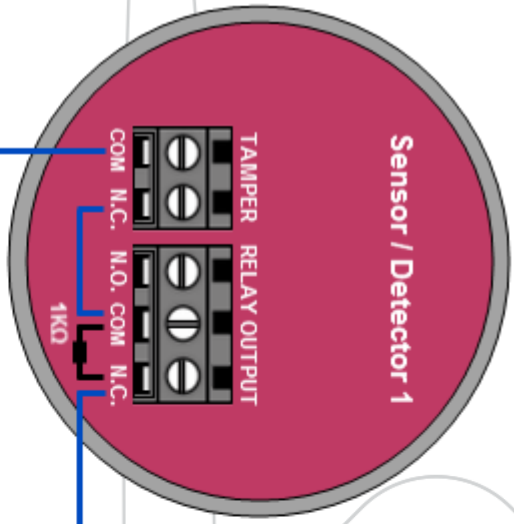


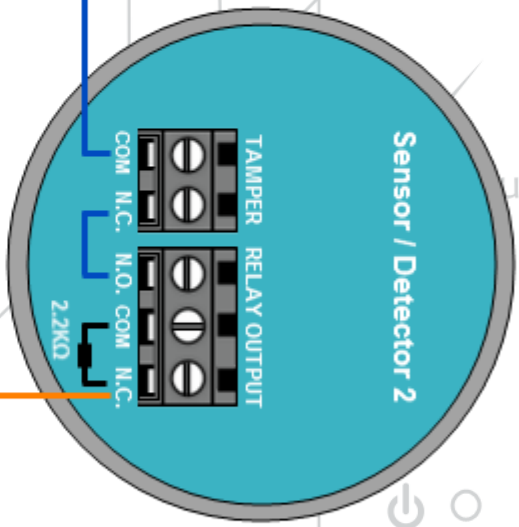
Wiring Example: Two sensors/detectors with relay base connected to zone input 1/3 of the Pegasus NX terminal block in double-mode, normally close (N.C.) contacts without End of Line (EOL) resistor.

15.7. Double-Mode: Normally Close (N.C.) Contacts without End of Line (EOL) Resistor, with Tamper Recognition

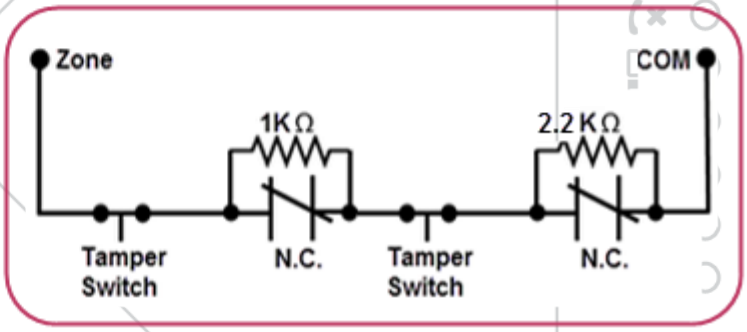


Pegasus NX Terminals

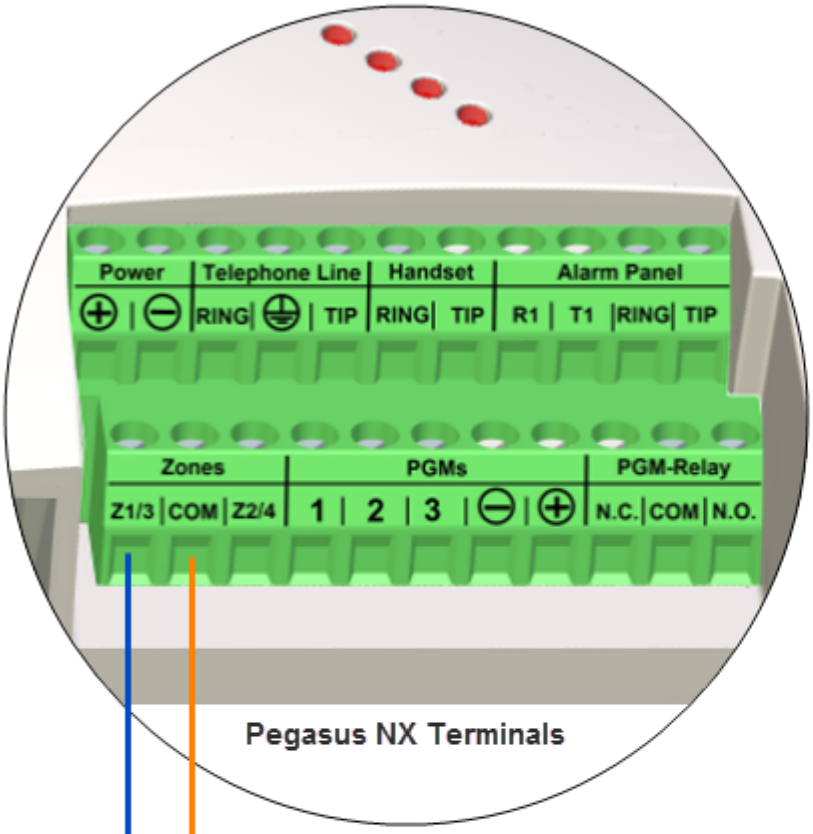




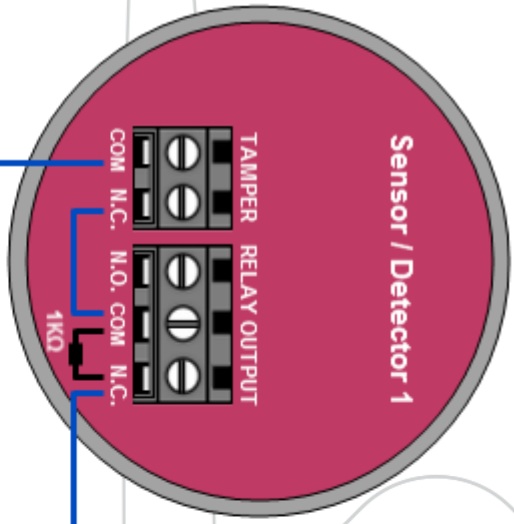
Wiring Example: Two sensors/detectors with relay base connected to zone input 1/3 of the Pegasus NX terminal block in double-mode, normally close (N.C.) contacts without End of Line (EOL) resistor, with Tamper recognition.

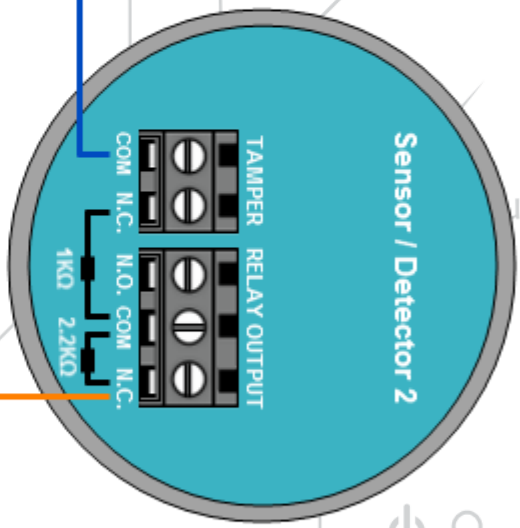


15.8. Double-Mode: Normally Close (N.C.) Contacts with End of Line (EOL) Resistor, with Tamper & Wire Fault Recognition

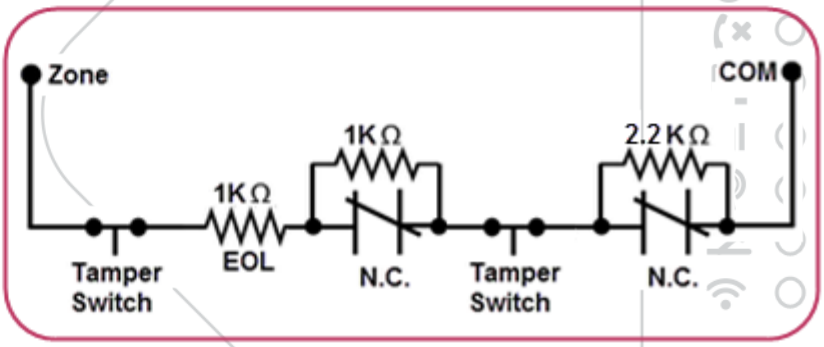


Pegasus NX Terminals

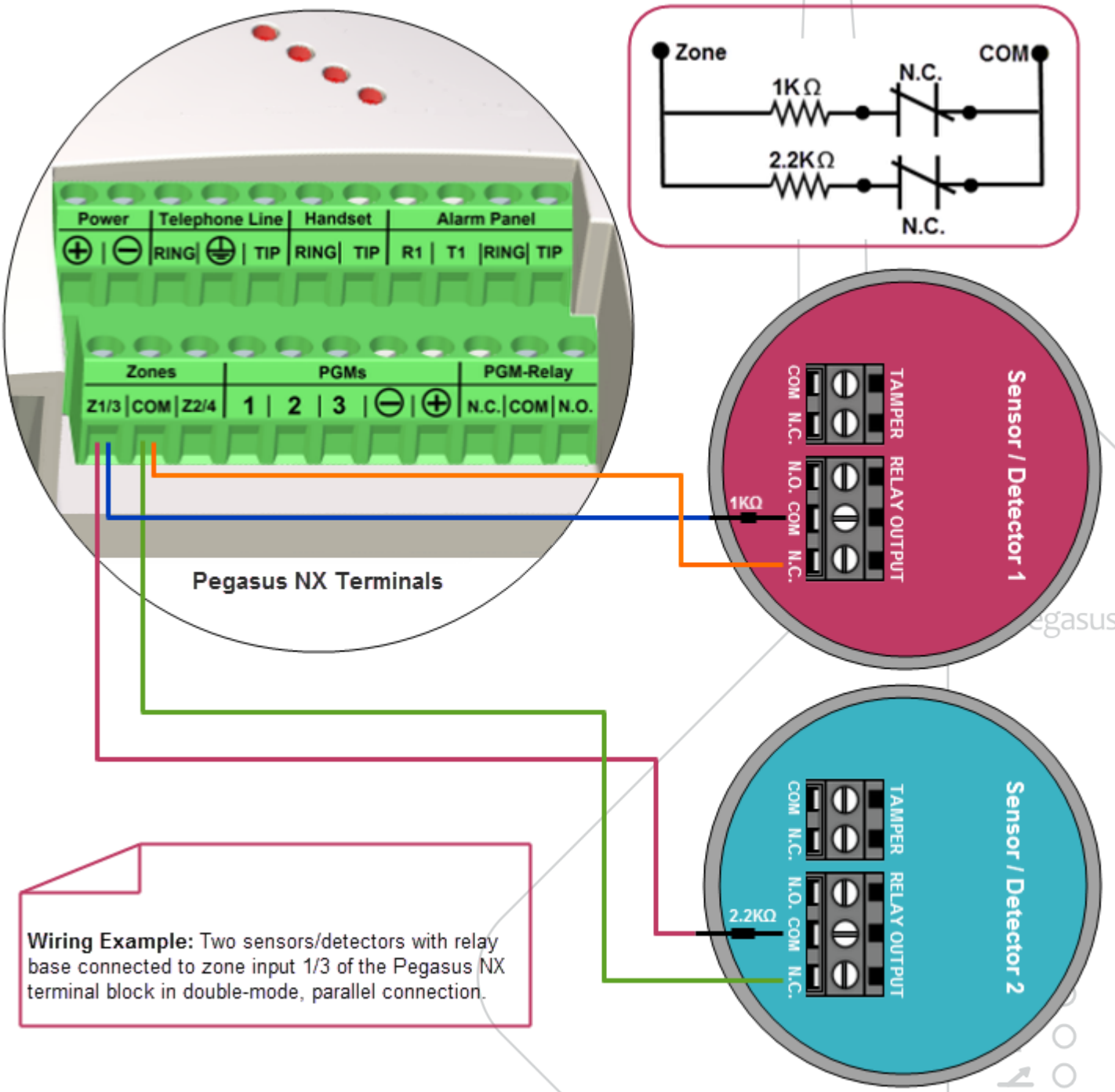




Wiring Example: Two sensors/detectors with relay base connected to zone input 1/3 of the Pegasus NX terminal block in double-mode, normally close (N.C.) contacts with End of Line (EOL) resistor, with Tamper and wire fault recognition.



15.9. Double-Mode: Parallel Connection

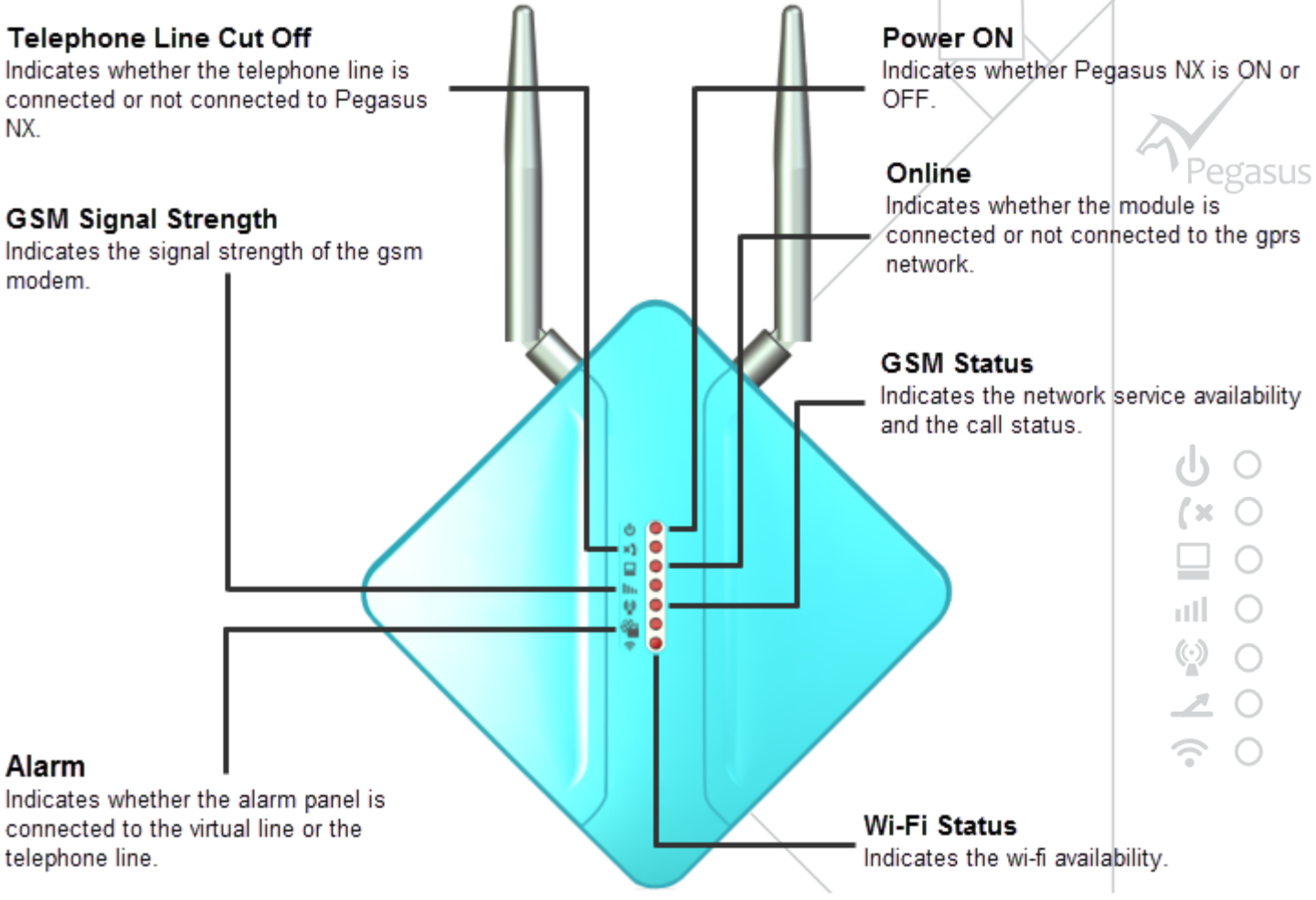


Wiring Example: Two sensors/detectors with relay base connected to zone input 1/3 of the Pegasus NX terminal block in double-mode, parallel connection.

16 How Does LEDs Work?

16.1. LEDs Description

Pegasus™ NX is built-in seven on board LEDs that emits light to the Pegasus™ front cover and front panel via specially designed and secured LED pipes under specific conditions.



LEDs	Condition	Function
Power ON Status	LED is OFF	(a) Application is not running, module is not in the working state.
	LED is ON	(a) Application is running, module is in the working state.
Telephone Line Cut Off	LED is OFF	(a) Telephone line is not connected to the module.
	LED is ON	(a) Telephone line is connected to the module.
Online	LED is OFF	(a) GPRS is not activated. (b) Module is not connected to the GPRS network.
	LED is ON	(a) GPRS is activated. (b) Module is connected to the GPRS network.
GSM Signal Strength	LED is ON	(a) GSM signal level is less than 12dB.
	LED is OFF	(a) GSM signal level is more than 12dB.
GSM Status	LED is OFF	(a) Device is OFF.
	LED Blinking: Fast Blinking (1 sec)	(a) Net search / Not registered / turning off.
	LED Blinking: Slow Blinking (3 sec)	(a) Registered Full service.
	LED Permanently ON	(a) Call is active.

LEDs	Condition	Function
Alarm	LED is OFF	(a) Alarm panel is not connected to the virtual line.
	LED is ON	(a) Alarm panel is connected to the virtual line
Wi-Fi Status	LED is OFF	(a) Wi-Fi is not activated. (b) Module is not connected to internet via wi-fi.
	LED is ON	(a) Wi-Fi is activated. (b) Module is connected to internet via wi-fi.

17 Appendix

17.1. Abbreviation

GPS	Global Positioning System	N.O.	Normally Open
GSM	Global System for Mobile communications	N.C.	Normally Close
GPRS	General Packet Radio Service	COM	Common
SIM	Subscriber Identity Module	GND	Ground
Wi-Fi	Wireless Fidelity	EOL	End of Line