



3PX Cellular Communicator



Dealer Installation Instruction Manual English

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PLEASE ACTIVATE YOUR DEVICE ON OUR WEB PORTAL ACCORDING TO THE INSTRUCTIONS ON PAGE 3 AND ALLOWING 10 MINUTES PRIOR TO TESTING FOR THE UNIT TO BECOME ACTIVE BEFORE INSTALLING HARDWARE ON SITE.

-Before Starting the installation process please ensure that there is cellular-network-coverage at the service-address. You can use the signal-strength-bar meter from a cellular telephone to easily verify this. Make sure there is a decent signal strength. If you do not have good cellular (GSM/3G/4G/LTE) reception on-site this communicator can be connected to the internet via the Ethernet port on top and used as Alarm over IP module only.

-The 1-year hardware warranty will begin upon activation of the unit.

Part 1: Activation- 10 minutes Before Installation

- a. Register the SIM # of your new cellular communicator to your existing dealer account in the 3PX Activation Portal or create a new account if you're a first-time user.

Head to the activation portal to activate the unit **10 minutes prior** to the planned installation.

www.m2marm.com



- b. **Complete the entire registration process through our website**, including adding the service address associated with the unit you are activating then open the account with Lanvac as you normally would.

The **SIM Number** is the 9-digit number on the front of the 3PX device.

The **Dealer Number for reporting** is a 5-digit number that will be provided to you by Lanvac.

The first **2-digits represent the dealer group number**, the **following 3 digits represent the line number**.

The **4-digit account number** you program in the account number field is the account number that will be sent to the monitoring station when an alarm is caused. Be sure to use a unique account number for each device. The number entered into the portal will replace any number programmed in the alarm control panel. No additional reprogramming is necessary other than to ensure that your alarm panel is programmed to communicate in **CONTACT-ID only**.

Regardless of what the account number programmed in the alarm panel is, the account number that you enter into the portal will be the account number reported to the central via the 3PX. Therefore, no reprogramming of the panel is required to change the account number.

- c. If this unit was purchased through a vendor such as Lanvac monthly billing will be done by that vendor.
- d. Please allow up to 15 minutes before the unit is active and set up with the central.
- e. The unit may take up 10 minutes to acquire the cellular network the first time it is plugged in. Once the Led is Steady and polling at a longer interval cellular network connection has been established.
- f. If you have trouble with activation please email us at support@3px.ca and we will reply as quickly as possible.

What's in the Box:

1. 3PX Cellular Communicator.
2. Antenna.
3. Magnetic antenna base with connector cable.
4. Power adapter 110 V-AC to 12 Volts D.C.
5. Power Lead wire for hardwired option.
6. RJ-11 Wire to connect to T & R (Telephone jack size plug on one end).
7. Connectors for Advanced Installation (Qty. 2).
8. Screwdriver



Open the box and inspect all items to ensure that there is no visible physical damage to the products. If you find evidence of physical damage that you believe may affect the operation of the hardware please contact the vendor immediately and return the damaged unit.

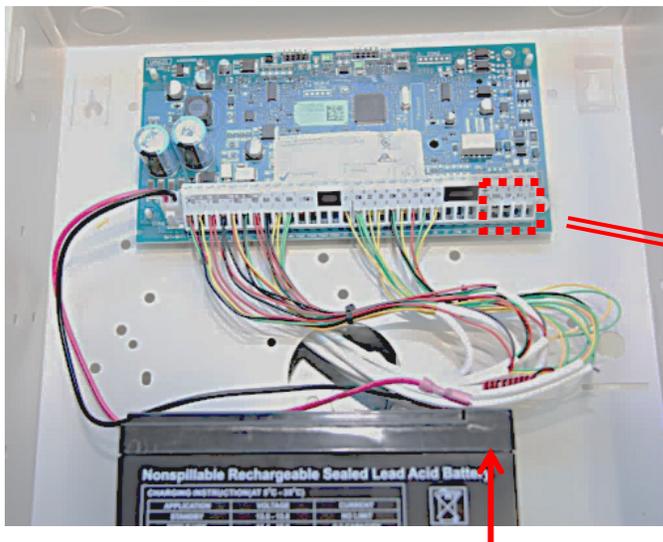
Part 2: Hardware Installation – Dealer

(Approximately 15 Minutes)

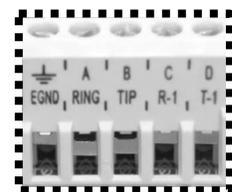
1. Call the central monitoring station and put the system in test for the next 1 hour.
2. Open the alarm control panel using the small key you have or by unscrewing the screws on the sides. If you cannot locate the key search the internet for a video on how to drill open a small cam lock (very easy). Be sure to always use eye protection and ensure your personal safety when using power tools.

Locate the terminal strip. The terminal strip is the part of the control-panel that all of the wires are connected to. Locate the section that indicates Communication or Tel-Co typically to the far right of the terminal strip. This section will be labeled “T” and “R” Terminals (or they can alternately be labeled: “Tip” and “Ring” as seen in the example photo below) as well as “R-1” and “T-1” Terminals.

Interior view of typical alarm



The small screws at the top of the terminal



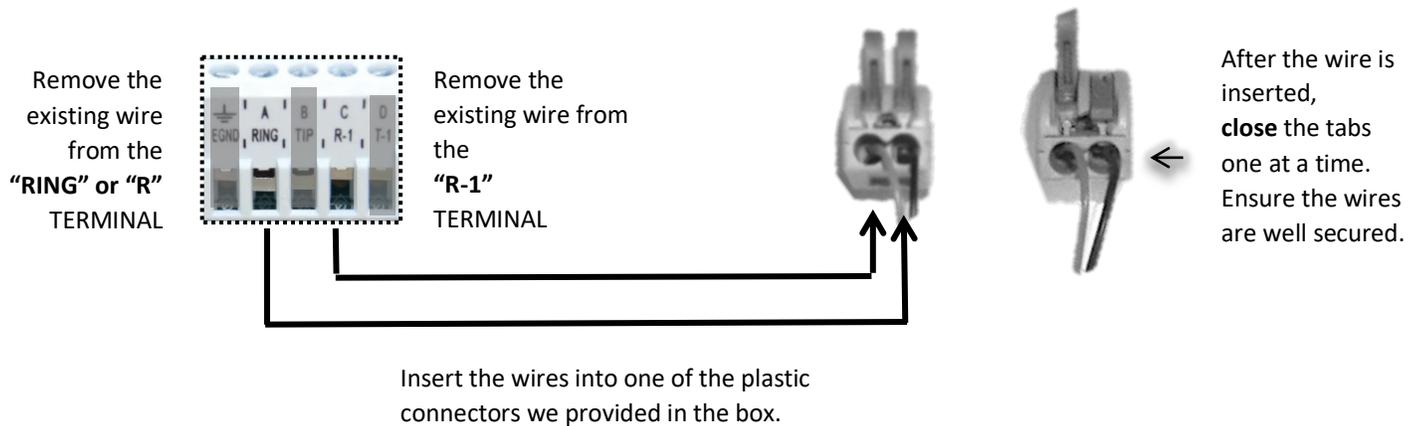
Magnified view of Terminal Strip

CAUTION! DO NOT SHORT-OUT THE BATTERY + and – TERMINALS OF YOUR EXISTING ALARM.

The following two steps, **STEPS 3 & 4**, are only necessary if you need to maintain an existing telephone land line. If you do not require maintaining the telco service to the CA-38A or RJ31X skip to STEP 5.

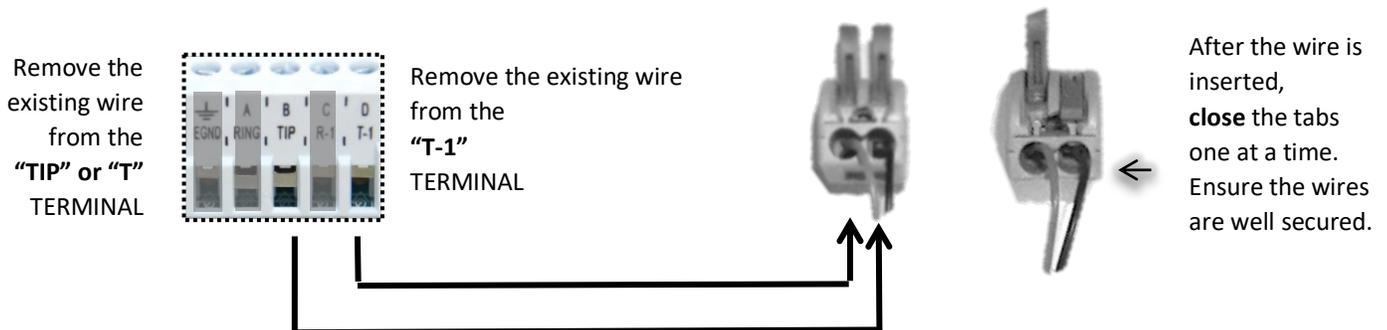
3. Remove the Ring and R-1 Wires and Splice them together using the connector we provided:

- a) Use the plastic screwdriver provided in the box to **LOOSEN** the **TWO** terminals labeled “Ring or R” and “R-1” by gently turning the screwdriver we provided you **counter-clockwise**. ↻
- b) **Remove** the old “Ring or R” and “R-1” wires from the terminal strip.
- c) **Insert** the old “Ring or R” and “R-1” wires into one of the **plastic-connectors** we provided in the box with the orange tabs in an upward position. Make sure the wire is fully pushed towards the back of the connector and close one at a time.

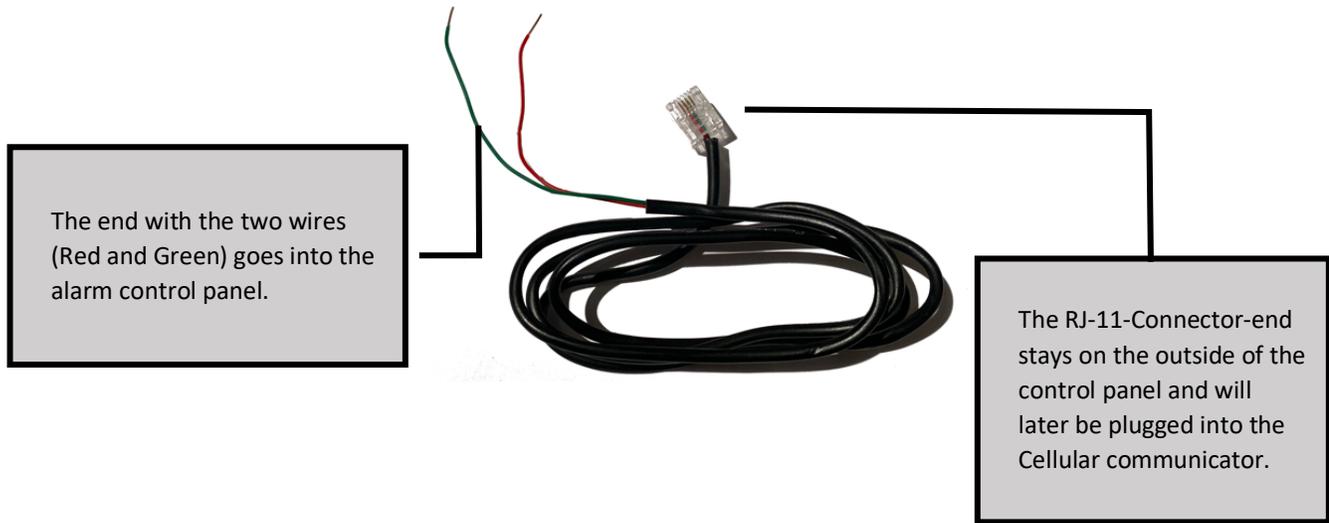


4. Remove the Tip and T1 Wires and Splice them together using the other plastic connector.

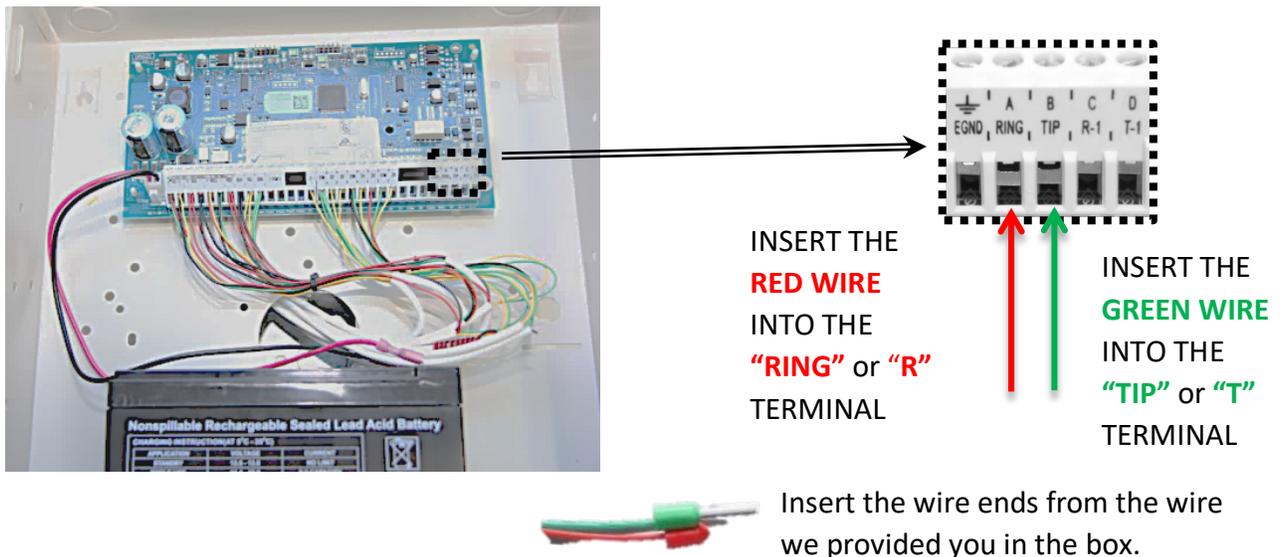
- a) Use the plastic screwdriver provided in the box to **LOOSEN** the **TWO** terminals labeled “Tip or T” and “T-1” by gently turning the screwdriver we provided you **counter-clockwise**. ↻
- b) **Remove** the old “Tip or T” and “T-1” wires from the terminal strip.
- c) **Insert** the old “Tip or T” and “T-1” wires into the second **plastic-connector** we provided in the box with the orange tabs in an upward position. Make sure the wire is fully pushed towards the back of the connector and close one tab at a time. This connector is simply splicing the old “Tip or T” wire with the “T-1” wire. This step is only necessary if you need to maintain an existing telephone land line.



5. Find an existing hole in the side of the metal box or open one of the pre-punched holes in the metal box and pass the **wire we included with the 3PX Cellular Communicator** through the hole so that the **exposed-wire-ends** are on the **inside** of the control-panel-box, and the **connector-end** is on the **outside of the box**.



- 6. Using the wire we provided you **Insert the GREEN-wire-end into the "TIP" or "T" terminal and gently but firmly tighten the terminal strip by turning the screwdriver clockwise.** ↻
- 7. Using the same wire we provided you in the box connect the **Red-wire-end into the "Ring" or "R" terminal and gently but firmly tighten the terminal strip by turning the screwdriver clockwise.** ↻



- 8. **Close the alarm control panel box.** Use your small key to re-lock the control panel box shut.

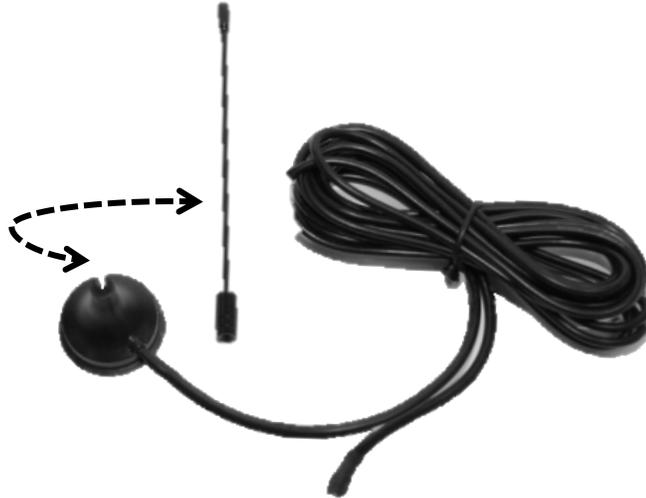
CAUTION! If you do not properly close your alarm control panel cover and the panel has a tamper-switch you may cause a trouble signal. Be sure that the panel cover is properly closed and that there are no wires preventing the cover from completely closing on all sides.

Your alarm Panel must be programmed to communicate in Contac-ID format which is the case for the vast majority of panels. If your panel is programed to communicate in a different format use the installer programming to change the reporting/ communication settings to Contact-id.

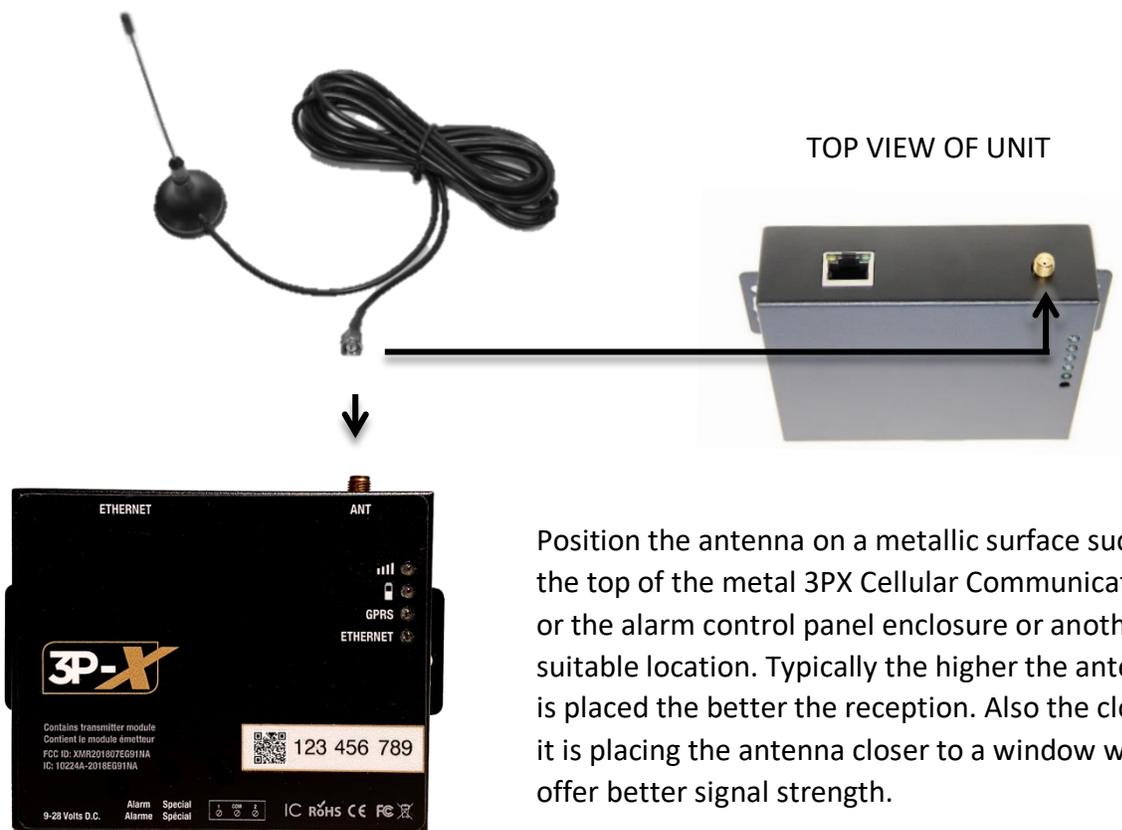
9. **Anchor** the *3PX Cellular Communicator* to the wall within reach of the new cable you just installed in the alarm panel by either screwing the device into a wood surface or by installing drywall anchors into the drywall and then screwing the unit into the anchors.
10. Plug the telephone type plug from the wire you just installed into the **“Alarm Panel”** jack on the 3PX Cellular Communicator.



11. Screw the antenna onto the magnetic base by turning it clockwise. ↻



12. Screw the antenna-connector to the **Antenna connection port** on the top right of the *3PX Cellular Communicator* by turning it clockwise. Do not over-tighten.



Position the antenna on a metallic surface such as the top of the metal 3PX Cellular Communicator, or the alarm control panel enclosure or another suitable location. Typically the higher the antenna is placed the better the reception. Also the closer it is placing the antenna closer to a window will offer better signal strength.

- 13.** Plug the **AC Power Adaptor** into the bottom left of the *3PX Cellular Communicator* where the label indicates 9-28 volts D.C.

Alternatively, you can use the advanced power cable provided in the box to hardwire the unit to the alarm panel's AUX power bus. By doing so the 3PX will also be able to use the alarm panels backup-battery in addition to its own internal backup battery for additional battery backup.

Caution! Make sure the antenna is connected before connecting the AC adaptor. Failure to do so could result in damage to the unit.



BOTTOM VIEW OF UNIT

The Hardware Installation is Now Complete!

Part 3: Power-Up to Verify Signal Strength and Power

(Approximately 3 Minutes)

Now that the hardware installation is complete and the unit is plugged-in check the LED indicators on the right-hand side of the unit.

- If the LED's have illuminated then the power is connected and the device is on.
- The Battery Symbol should be flashing to indicate that the battery is now charging.
- Please allow the unit to charge for up to 6 hours and then the battery LED will stop flashing.



Check the Cellular Signal Bars to ensure you have a connection to the local cellular network.

Battery Symbol Flashing means the backup battery is charging. Steady Led indicates the battery is charged.

GPRS Data and ETH Data will only flash when the alarm panel is actually communicating to the central (i.e. only when there is an alarm or test signal going through)

 If the **Battery LED** is not illuminated and is not flashing but the other LED's are on then the unit is running on battery power and is not receiving power from the outlet. If none of the LED's are on then the unit is not plugged in and has no battery available. A steady battery LED indicated the battery is fully charged.

 If the **Cellular GSM Signal LED** is flashing very quickly or not on at all, this indicates poor or no cellular network connection. In this case try re-positioning the antenna to a more suitable location / higher location that will provide better cellular network access.

ETHERNET If connected to the internet the ethernet LED will be on steady. If it is not on it is likely due to a firewall or switch that is preventing the unit from communicating to our servers.

(TIP: If there are metallic heating/AC ducts then the antenna can be attached to the top of the duct at ceiling height)

(TIP: Monitoring the signal strength bars on a cellular telephone will offer an accurate idea of where the best reception can be obtained before repositioning the antenna).

The LED Indicator Section at the end of this manual will provide more details and the meaning of all the various intermittent flashing signals the LED's can make.

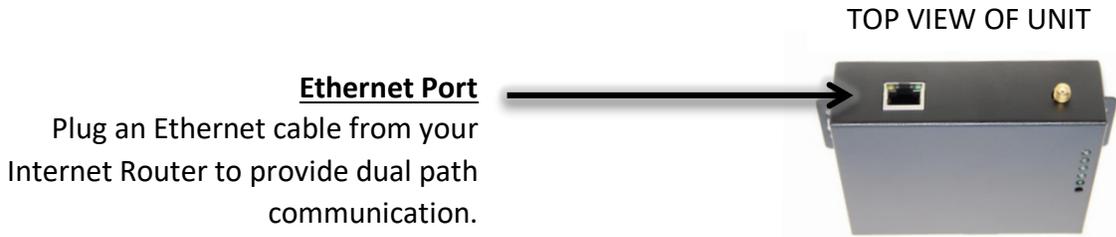
Part 4: Test the System after Installation

The final step in is to test your alarm system by causing an alarm and verify with the monitoring central that the signals have been successfully received with the correct account number.

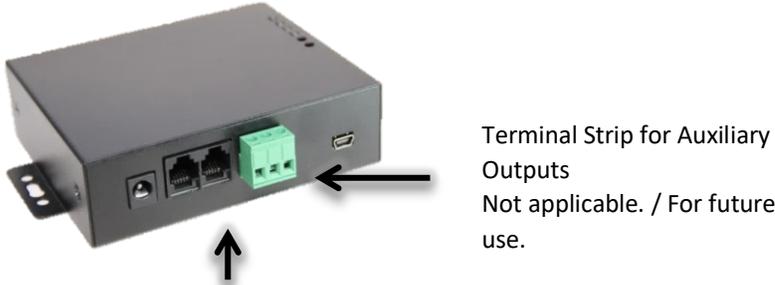
Additional Hardware Information- Optional Paths of Communication and SIM Card Location

Dual-Path Communication (Optional) If you wish to have a primary communication to the central over Ethernet, then plug an **Ethernet Network cable** (Category 5E or Category 6) from the Ethernet port on the TOP of the *3PX Cellular Communicator* to your Internet router or Internet switch and this will automatically enable the unit to have dual-path communication to the central whereby **the primary connection is via the internet** and the **cellular modem** will serve as a backup only used if the internet connection was cut. There is no additional charge for this service and the increased polling frequency of the Ethernet connection adds additional security.

If this is not connected then the unit will simply rely on the cellular link as the primary communication method independent of internet service.



BOTTOM VIEW OF UNIT



POINT OF TELEPHONE SERVICE PASS-THROUGH- TRIPLE PATH COMMUNICATION

This port can be connected to the exiting alarm Telco connection if you wanted regular P.O.T.S. (Point of Telephone Service) connection in addition to the Cellular and Ethernet connections.

This Port will dial the existing monitoring stations phone number that is already programmed in the alarm panel. (For Triple-Path Communication)

UNDERSIDE VIEW OF UNIT

ON / OFF SWITCH
The unit is switched on From the factory
This can be used to restart the unit if necessary.



SIM CARD SLOT
The unit contains a factory installed sim-card. Please note that the unit is locked to the SIM Card provided with the unit and cannot be replaced.
The SIM Card Short Number

PROGRAMMING KEY-SET BUTTON
Do not press the key-set button. This will lock your unit out.

LED Indicators:

Cellular GSM Signal:

- Mainly ON indicates Strong connection.
- Faster flashing indicates no connection. Or unit has not been activated.

Battery:

- **Steady LED** indicates that the on-board battery is fully charged.
- **Flashing LED** is an indication that the battery is charging.
- **NO LED** is an indication that the 3PX Cellular Communicator is currently operating on battery power. Either: the unit is not plugged in; the power outlet is not working; or there is power outage. Power should be supplied as soon as possible so that the unit does not run out of battery power. Once the battery is depleted the unit will no longer be able to communicate until power is restored. The battery can typically last 4 hours or more.

GPRS Data:

- This LED will flash as the communicator is transmitting packets of Data as received from the control panel and being sent to the central monitoring station. This indicates communication and will only illuminate when the alarm panel is trying to communicate.

Ethernet Data:

- This LED will remain ON when connected to the internet and to the 3PX servers. If it is not on it may be due to a firewall or switch preventing communication to the 3PX Servers.
NOTE: When the Ethernet is connected, it becomes the primary communication path. Upon its failure or disconnection, the Cellular 4G/LTE on board modem will be the backup communication to the central monitoring station and will automatically be used by the *3PX Cellular Communicator*.

AUX Output 1 & 2:

- Not Applicable



Mini USB Connector:

- The mini USB Connector is used for factory set up and re-programming. There are no additional features provided by this connection point for the end user, and therefore should not be used.

Legal Terms and Conditions

The end user agrees to the service legal terms and conditions entered into with NBG Telecom and Lanvac surveillance inc., the Service Providers.