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MVP-IM3-80211 Wired / Wireless Gateway Installation Guide

WI2818LF 3/25

OVERVIEW

The **MVP-IM3-80211** "V3" Gateway, identified by the "3" in the "IM3" model name, represents the latest generation of Networx "Wireless/Wired" Gateways utilized in the Networx™ wireless system. It is the most versatile model in the Networx Gateway lineup to date. Preloaded with MVP Access firmware, this model is designed for plug-and-play functionality, ensuring easy setup over DHCP.

The **MVP-IM3-80211** Gateway supports up to 63 Networx locks or NetPanels and can enhance wireless coverage with up to **(7) AL-IME2-EXP** Expanders, each providing an additional 75-100 feet of range.

The **MVP-IM3-80211** improves connectivity by offering both wired Ethernet and wireless options through a bi-directional radio. While maintaining the core features of the original Networx Gateway Modules, it adds enhanced installation flexibility. Additionally, it features an intuitive Network Settings option, configured via the cloud, enabling users to set a static IP and Wi-Fi. For further information, please see the Alternate Configuration Options on page 4.

Blue ID Card

We strongly recommend that when installing any model Gateway, a **blue-colored** "Gateway ID Card" be completed. Gateway physical locations may easily be forgotten. These ID cards may prove very useful when replacing Gateways, when selecting a particular Gateway to use to Discover locks, or whenever an installed Gateway needs to be physically located.

MVP-IM3-80211 SPECIFICATIONS

WIRELESS SPECIFICATIONS

Wireless Standards: IEEE 802.11b; 802.11g
Frequency Range: 2.412 - 2.484 GHz
Output Power: 14dBm + 1.5dBm/-1.0dBm
Maximum Receive Level: -10dBm (with PER < 8%)
Data Rates With Automatic Fallback: 54Mbps - 1Mbps
Modulation Techniques: OFDM, DSSS, CCK, DQPSK, DBPSK, 64 QAM, 16 QAM

NETWORK RANGE

Gateway / Expander to Locks: Typical indoor range: Networx 75-175'; ArchiTech Networx: 50-125'.

Gateway / Expander to Expander: Typical indoor range: 75-175'. **Note:** Actual range varies with building construction.

AL RADIO LINK

900 MHz GFSK
50 Channels
10mW power output

POWER - Provided by UL Listed Class 2 Transformer
Peak Supply Current: 650mA
Input Voltage: 5 - 6VAC

AVERAGE POWER CONSUMPTION

1300mW (WLAN mode; maximum data rate)
300mW (WLAN mode; idle)
750mW (Ethernet Mode)

ENVIRONMENTAL

Operating Temperature: -20° to 60°C (-4° to 140°F)
Storage Temperature: -40° to 85°C (-40° to 185°F)

PHYSICAL

Enclosure Size: 4.5"H x 6.0"W x 1.94"D
Weight: 0.5lbs.

~ GATEWAY ID CARD ~

When physically installing the Gateway, fill in all information on this card. This information will be used when adding gateway devices to MVP Access. Keep this card in a safe place. Do not discard!

GATEWAY MODEL > MVP-IM3-80211
ETHERNET MAC ADDRESS > 12-34-56-78-90-12
Wi-Fi MAC ADDRESS > WIFI: 123456789013



GATEWAY INSTALLED LOCATION _____

O1440LF 12/24

TIP

The **AL-NSM** Networx Signal Meter tool can help you perform a site survey test of the premises to find the optimum location for Gateways relative to Networx locks; as well as determine the optimum number of Gateways (or Expanders) needed for signal area coverage. See [WI2092](#) or speak to your sales representative for more information.



1 MOUNTING THE GATEWAY

The **MVP -IM3-80211** rear housing must be mounted "up" as shown on the page 6 template; i.e. when the front housing is attached, its logo must be located at the lower right with the front housing positioned "up" in a conventional manner (the unit contains internal antennas that must be positioned vertically). *Horizontal "flat" and ceiling mounting of the enclosure is to be specifically avoided.*

Mount as follows:

1. Insert a small flat-head screwdriver into the slots at the bottom and twist while applying inward pressure (see Fig. 1; insert the screwdriver closer to the edges of the unit, as shown in the Fig. 1 "inset" image).

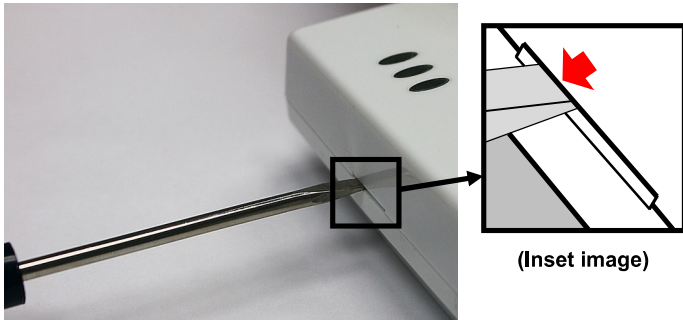


Fig. 1: To separate rear housing from cover
(Inset: Insert flat-head screwdriver closer to the edges of the unit)

2. Using the rear housing as a mounting template, secure the unit to a wall or other flat surface using the hardware provided (see page 6 for printed template). Shown in Fig. 2, the rear housing includes two mounting holes for single-gang (A) and four mounting holes for double-gang (B) electrical utility boxes, as well as four all-purpose holes (C) for mounting to drywall or other surfaces (use minimum #6 screws suitable for the surface).

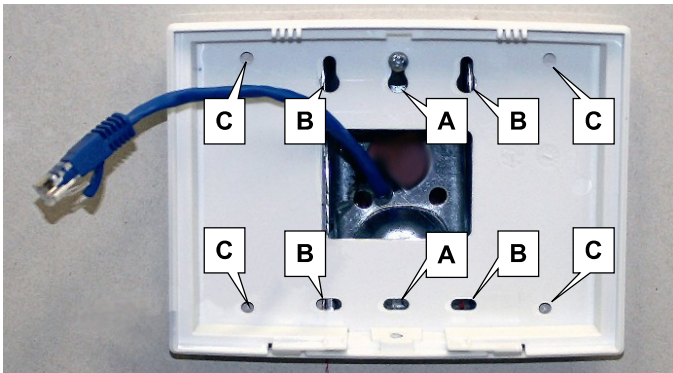


Fig. 2: Rear housing mounting holes for single-gang (A) and double-gang (B) electrical boxes, and four all-purpose holes (C)

3. Close the housing cover by first engaging the hooks at the top, then snapping the bottom together. Secure the cover with the Bottom Screw provided as shown in Fig. 3.



Fig. 3: Bottom Screw

GATEWAY LOCATION GUIDELINES

Before finalizing the location for your Gateway, consider the following points:

- Gateways should be placed within **175 feet** radial distance from the intended wireless lock locations.
- **Avoid** mounting Gateways within **6 feet** of any electronic devices, panels, electrical wiring, or metal obstructions.
- For extended coverage, consider using **AL-IME2 expanders**, which provide additional range of up to **75-100 feet**.
- Gateways must be mounted **vertically**—horizontal or "flat" ceiling mounting should be avoided.
- The preferred mounting height is **6 to 12 inches** below a standard 8-9 foot ceiling.
- Open areas enhance signal range; however, **concrete** and **brick** walls, ceilings, and narrow corridors can limit range.
- **Architech series locks** typically have a shorter range to/ from a Gateway.
- The Gateway should generally be within **75 feet (radially)** of an **AL-IME2-EXP Expander**.
- Ensure that the location allows access to an **RJ-45 Ethernet cable** connection.
- **Elevated positions** are recommended to optimize signal strength—avoid placing the Gateway in drop ceilings.
- Wood and wallboard have minimal impact on signal strength, concrete or brick can reduce it by up to 35%, but **steel-reinforced concrete** and **metal lath** can significantly reduce it (up to 90%).
- Avoid installing Gateways in **computer closets** or **server rooms**, as these environments can negatively affect signal strength.
- In multi-floor buildings, it is recommended to install **one Gateway per floor**.

Helpful Tips

- In difficult installations wherein signal problems exist, the use of (multiple) **AL-IME2-EXP** Expanders throughout the premises is recommended. **AL-IME2-EXP** Expanders extend the coverage area of Version 3 Gateways, allowing control of up to its rated maximum of 63 locks. Up to 7 Expanders can be added to one Gateway. For more information, see Expander Installation Manual [WI2156](#).
- We recommend obtaining or creating a layout of your intended system identifying all proposed installation locations, also noting building construction materials to assist in determining optimal Gateway installation locations

IMPORTANT: If you plan to use **AL-IME2-EXP** Expanders with the Gateway, be sure to read the **"EXPANDER GROUP" DIALS** section on page 5 **before** powering your Gateway.

The above guidelines and tips should be followed for each additional Gateway added to the system.

2 FIRST TIME POWER UP

1. With the gateway front housing removed, note the **AC POWER INPUT** and the **RESET** button (refer to Fig. 4). Connect the supplied AC Power Transformer to the **AC POWER IN** (Non-Polarity Sensitive) and allow 30 seconds for the gateway to power up.
2. You are now ready to connect the gateway to the network.

IMPORTANT: The Yellow LED should be SOLID ON, with the Green LED flashing rapidly. If the gateway is not flashing rapidly as described, please perform a **Factory Reset**.

RESET PROCEDURES

Factory Reset (Gateway powered on)

Clears the Gateway table for all locks and expanders. The MVP Cloud settings reset to defaults, defaults network settings back to DHCP.

Note: If configured for Wi-Fi to turn off Wi-Fi, under **Network Settings** for the Gateway, you must delete the password and the SSID, then press Save Settings to turn the Wi-Fi radio off.

1. While powered on, press and hold the **RESET** button until the **Red** and the **Yellow** LEDs both turn on solid; then release the **RESET** button.
2. Both the **Yellow** and **Red** LEDs will remain on solid for 2 minutes.
3. The **Red** LED will turn off, the **Yellow** LED will remain on solid and the **Green** LED will start to flash rapidly.

You are now ready to connect the gateway to the network. Refer to the Gateway LEDs on page 5.

Soft Reset (Gateway powered on)

Clears the Gateway Table for all locks and expanders. After this type of reset, through MVP Cloud, perform a "Send Config Table to the Gateway," to reconfigure it.

1. Press and hold the **RESET** button until the **Red** LED turns on solid, then release the **RESET** button.

3 CONNECTING THE GATEWAY TO THE NETWORK

IMPORTANT: The MVP-IM3-80211 is a plug-and-play device, allowing for immediate use with a wired Ethernet connection via DHCP. **Please note that the gateway can only be discovered by the MVP Access Cloud if there is internet service at the location.**

1. With the gateway front housing removed, locate the **Ethernet Port** (see figure 4).
2. Connect one end of the ethernet cable to the Ethernet Port on the gateway and the other cable end to the network switch or router. The gateway will obtain an IP address automatically using DHCP. Refer to the Gateway LEDs on page 5. (Internet Access is required)

Congratulations! You're finished! Now please follow the steps in the included [Getting Started Guide—Alarm Lock Trilogy Network Wireless Locks / Net Panel \(WI2802\)](#) for detailed steps on how to activate and add your wireless gateway into MVP Access Cloud to begin discovering your locks.

Note: For steps on how to assign a static IP address and/or if using Wi-Fi, see "**Alternate Configuration Options**" on page 4.

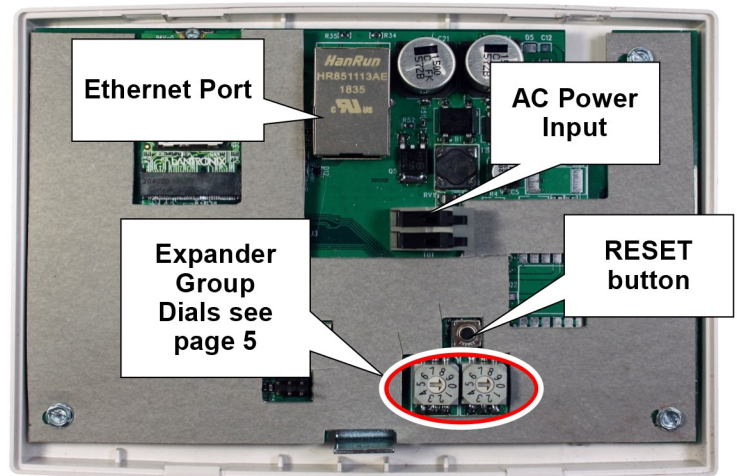


Fig. 4: "RESET" button and two "Expander Group dials"

ALTERNATE CONFIGURATIONS OPTIONS

STATIC IP / WI-FI CONFIGURATION

The gateway can also be assigned a Static IP address and connect to the customer's network via 802.11 Wi-Fi. After adding the gateway in the Com Port screen with a wired Ethernet connection using DHCP first, the simplest way to configure these options is through the MVP Access Cloud portal. See the steps below for "**Assigning a static IP address or Wi-Fi connection using the MVP Access Cloud.**"

If using a Static IP and/or Wi-Fi please contact the network administrator to obtain the necessary IP address, subnet mask, default gateway, and/or the wireless network configuration (SSID and Password) for each Alarm Lock Gateway device.

Why use a Static IP Address

Using a static IP address for each Gateway can be helpful if:

- The sites network does not have DHCP Enabled.
- Allows for operation across subnets in large corporate networks (such as those that exist between buildings)

ASSIGNING A STATIC IP ADDRESS and/or WI-FI USING THE MVP ACCESS CLOUD

- Add the wireless gateway com port to the MVP Access Cloud Portal using steps outlined in the [Getting Started Guide WI2802](#).
Note: A wired Ethernet connection with DHCP must be used first.
- Go to **Configuration > Wireless Configuration**. Highlight your active gateway and select **Network Settings**.
- **Static IP:** Uncheck "**Use DHCP**" and enter your static **IP Address**, **Subnet Mask** and router **Gateway** then press **Save Settings**. **Note:** If you entered the wrong Static IP Information, perform a *Factory Reset* back to DHCP then reconfigure.
- **Wireless (Wi-Fi):** If using a wireless network, change the Wireless Mode to **Wireless**. Enter your exact wireless **SSID** (cAsE Sensitive) and **Password (Key)** then press **Save Settings**. When enabling wireless mode DHCP is used. Once Command Status is completed, remove the ethernet cable to test. **Note:** If you entered the wrong Wi-Fi data, you must reconnect via a wired connection, and re-enter the correct Wi-Fi information.

(ADVANCED USERS ONLY) ASSIGNING A STATIC IP ADDRESS USING THE BROWSER-BASED GUI

Using the Browser-based GUI is recommended for installations where DHCP is not available and a static IP address is needed.

IMPORTANT: Before proceeding, power on the gateway. Then, add it under **Configuration > Com Ports**. Next, go to **Configuration > Wireless Configuration**, select **Network Settings**, uncheck **DHCP**, enter the static **IP Address**, **Subnet** and **Gateway** that will be used, then press **Save Settings**.

- **Hotspot Method:** Connect to the gateway's Wi-Fi hotspot using a laptop or mobile phone. For iPhones, use Safari; for Android, use Chrome. To enable the hotspot, First **Factory Reset** the gateway. Wait for the **green LED** to blink rapidly, then press and release the **Reset** button for 1 second. In the list of "Available Networks" connect to the Wi-Fi named "AL" followed by the last 6 digits of the MAC address. **Note:** When prompted for a Wi-Fi password enter **MVPAccess** as the password, then press connect (If prompted to stay connected with no internet access say "Yes"). Once connected, open a browser and go to **192.168.0.1**. Log in with the username **admin** and password **MVPAccess**. To set up a static IP address navigate to the network settings; you can find this option under "**Network**" > "**eth0**" > "**Interface**" > "**Configuration**" within the browser-based GUI.

To Set to a Static IP Address in X-Pico:

1. **Disable DHCP Client**
2. Enter the **IP Address** (Static). Note: If your subnet uses the default 255.255.255.0 subnet mask, you can enter just the IP Address. However if a different subnet mask is used, after you enter the IP Address put a space then enter your full subnet mask.
3. Enter your **Default Gateway**
4. Enter a **Primary DNS**. This field must contain a well-known DNS Server. If unknown, use 8.8.8.8 as the Primary DNS.
5. Press **Submit**
6. On the left column click **Device**, then select **Reboot** and press **Okay** at the top. (You must reboot from the browser-based GUI, for the settings to take effect)

- **Wired Ethernet Method:** Ensure ethernet cable is connected. First, **Factory Reset** the gateway. When DHCP is not available, the MVP Gateway will generate an APIPA IP address, (i.e 169.254.x.x). To connect to the gateway's APIPA address, use the Lantronix "Device Installer" software. In the software, select "**Assign IP**" to run the wizard. To download Device Installer, [click here](#) or visit tech.napcosecurity.com, Navigate to **Software Downloads > Napco Access Pro**, and look for the Lantronix Device Installer. In Lantronix Device Installer, Log in with the username **admin** and password **MVPAccess**.

EXPANDER GROUP" DIALS

If using expanders, set the expander group dials before discovering the gateway and expanders. Inside the Gateway, there are 2 rotary dials to set the "Expander Group" for **AL-IME2-EXP** Expanders (which have identical dials). The dial settings on the Gateway must match those on the Expanders. **Important:** Each Gateway must have a unique "Expander Group" value to prevent accidental discovery of the wrong Expanders. For more details about installing **AL-IME2-EXP** expanders, see [WI2156](#).

Expander Group values of "00" through "99" are valid selections.

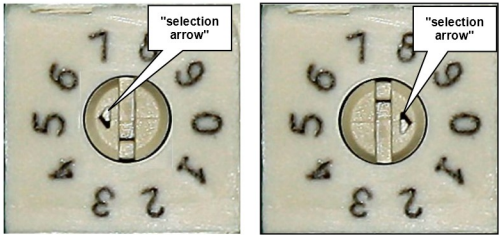


Fig. 6. Example: The above Expander Group dials are set to "50"

IMPORTANT: The small "selection arrow" on each dial must be pointing directly to the desired Group value. In Fig. 6 (above), the Group value is set to "50". Use a small flat-head screwdriver to turn the dials and make the selections. *Be sure to orient the Gateway as shown above with the **RESET** button ABOVE the dials to ensure proper Group setting!*

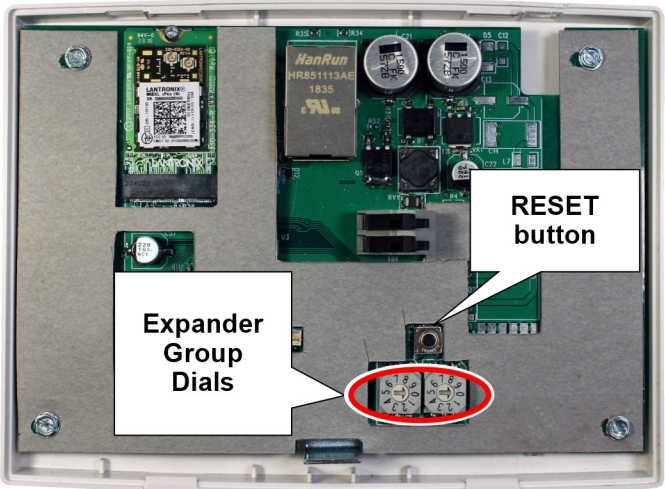
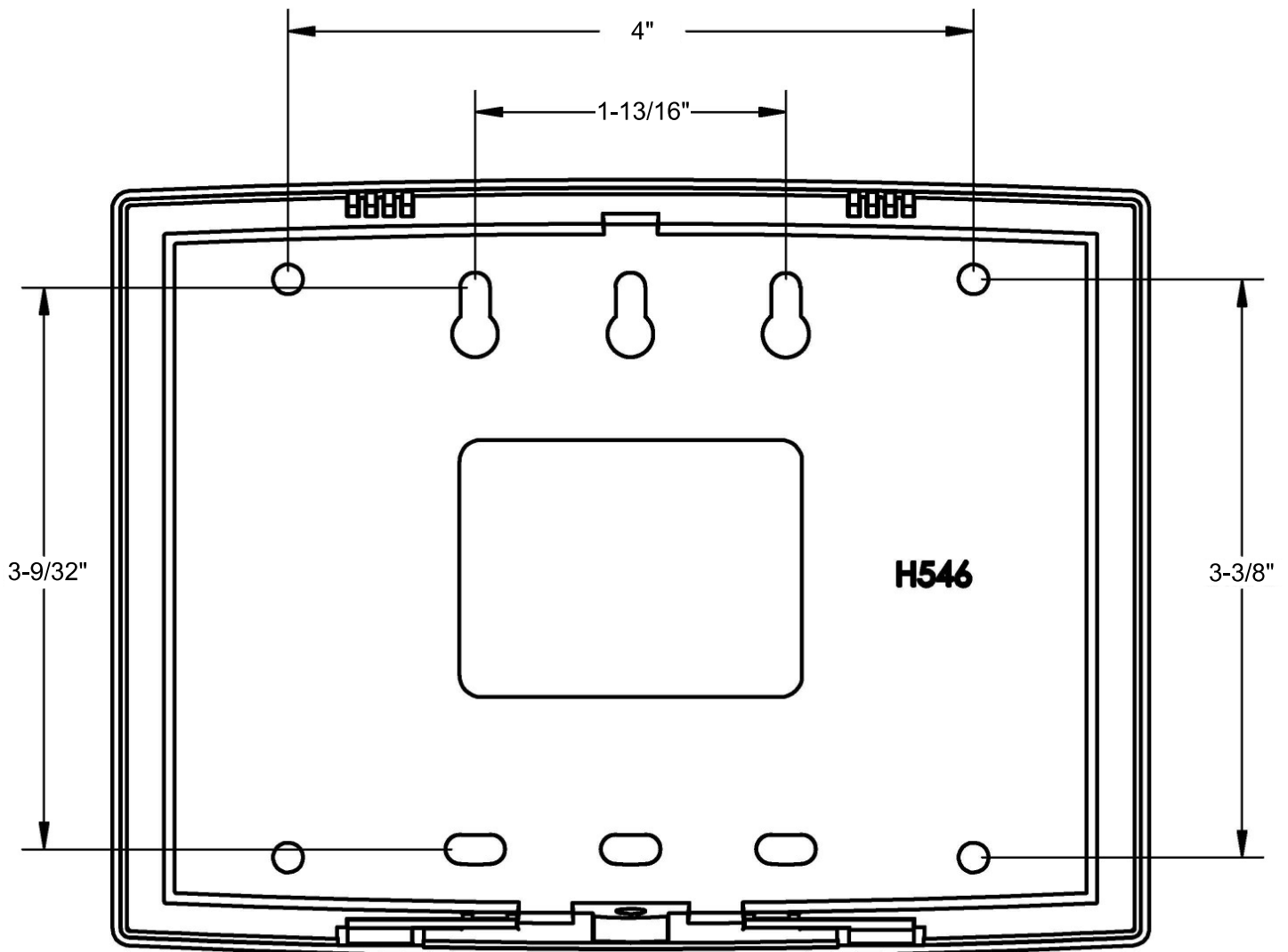


Fig. 5: "Expander Group dials"

GATEWAY LED INDICATIONS	
Yellow	Receiver On (normal operation)
Red	Transmitter On
Green / Red	4 Green / Red blinks together - Internet Connection Lost
Green	(Gateway Status)
	Initial Setup / Unconfigured / Awaiting Discovery - Rapid blinking / Flashing
	Idle / Configured Normally - 1 blink per second (solid green check-in)
	Lock Communication Fail - 2 blinks (continuously)
	Expander Communication Fail - 4 blinks (continuously)

MVP-IM3-80211 Mounting Template



ALARM LOCK LIMITED WARRANTY

ALARM LOCK SYSTEMS, INC. (ALARM LOCK) warrants its products to be free from manufacturing defects in materials and workmanship for twenty four months following the date of manufacture. ALARM LOCK will, within said period, at its option, repair or replace any product failing to operate correctly without charge to the original purchaser or user.

This warranty shall not apply to any equipment, or any part thereof, which has been repaired by others, improperly installed, improperly used, abused, altered, damaged, subjected to acts of God, or on which any serial numbers have been altered, defaced or removed. Seller will not be responsible for any dismantling or reinstallation charges, environmental wear and tear, normal maintenance expenses, or shipping and freight expenses required to return products to ALARM LOCK. Additionally, this warranty shall not cover scratches, abrasions or deterioration due to the use of paints, solvents or other chemicals.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. THERE IS NO EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. ADDITIONALLY, THIS WARRANTY IS IN LIEU OF ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF ALARM LOCK.

Any action for breach of warranty, including but not limited to any implied warranty of merchantability, must be brought within the six months following the end of the warranty period.

IN NO CASE SHALL ALARM LOCK BE LIABLE TO ANYONE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, EVEN IF THE LOSS OR DAMAGE IS CAUSED BY THE SELLER'S OWN NEGLIGENCE OR FAULT.

In case of defect, contact the security professional who installed and maintains your security system. In order to exercise the warranty, the product must be returned by the security professional, shipping costs prepaid and insured to ALARM LOCK. After repair or replacement, ALARM LOCK assumes the cost of returning products under warranty. ALARM LOCK shall have no obligation under this warranty, or otherwise, if the product has been repaired by others, improperly installed, improperly used, abused, altered, damaged, subjected to accident, nuisance, flood, fire or acts of God, or on which any serial numbers have been altered, defaced or removed. ALARM LOCK will not be responsible for any dismantling, reassembly or reinstallation charges, environmental wear and tear, normal maintenance expenses, or shipping and freight expenses required to return products to ALARM LOCK. Additionally, this warranty shall not cover scratches, abrasions or deterioration due to the use of paints, solvents or other chemicals.

This warranty contains the entire warranty. It is the sole warranty and any prior agreements or representations, whether oral or written, are either merged herein or are expressly cancelled. ALARM LOCK neither assumes, nor authorizes any other person purporting to act on its behalf to modify, to change, or to assume for it, any other warranty or liability concerning its products.

In no event shall ALARM LOCK be liable for an amount in excess of ALARM LOCK's original selling price of the product, for any loss or damage, whether direct, indirect, incidental, consequential, or otherwise arising out of any failure of the product. Seller's warranty, as hereinabove set forth, shall not be enlarged, diminished or affected by and no obligation or liability shall arise or grow out of Seller's rendering of technical advice or service in connection with Buyer's order of the goods furnished hereunder.

ALARM LOCK RECOMMENDS THAT THE ENTIRE SYSTEM BE COMPLETELY TESTED WEEKLY.

Warning: Despite frequent testing, and due to, but not limited to, any or all of the following; criminal tampering, electrical or communications disruption, it is possible for the system to fail to perform as expected. ALARM LOCK does not represent that the product/system may not be compromised or circumvented; or that the product or system will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; nor that the product or system will in all cases provide adequate warning or protection. A properly installed and maintained alarm may only reduce risk of burglary, robbery, fire or otherwise but it is not insurance or a guarantee that these events will not occur. CONSEQUENTLY, SELLER SHALL HAVE NO LIABILITY FOR ANY PERSONAL INJURY, PROPERTY DAMAGE, OR OTHER LOSS BASED ON A CLAIM THE PRODUCT FAILED TO GIVE WARNING. Therefore, the installer should in turn advise the consumer to take any and all precautions for his or her safety including, but not limited to, fleeing the premises and calling police or fire department, in order to mitigate the possibilities of harm and/or damage.

ALARM LOCK is not an insurer of either the property or safety of the user's family or employees, and limits its liability for any loss or damage including incidental or consequential damages to ALARM LOCK's original selling price of the product regardless of the cause of such loss or damage.

Some states do not allow limitations on how long an implied warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, or differentiate in their treatment of limitations of liability for ordinary or gross negligence, so the above limitations or exclusions may not apply to you. This Warranty gives you specific legal rights and you may also have other rights which vary from state to state.



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