## Models PHN11, PHN21, PHN22 & PHNRPT



## **Overview**

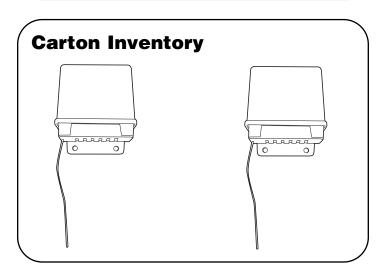
This manual covers:

- PHN11: Phantom Relay Module (1 Ch/ 1 Dir)
- PHN21: Phantom Relay Module (2 Ch/1 Dir)
- PHN22: Phantom Relay Kit (2 Ch/2 Dir)
- PHNRPT: Phantom Repeater Module

The PHN11 and PHN21 are designed to work with one Transmitter and multiple Receivers or Repeater combinations.

The PHN22 is designed to work with one Transmitter and one Receiver/Repeater combination.

The PHNRPT is designed to extend the range of the Phantom Products.



# **Features**

The Phantom Products are designed to work for nearly any control application.

**Camera Indexing:** User is able to index perimeter PTZ cameras to relay events like gate open/close and traffic movement.

**Broadcast Indexing Commands:** Broadcast ability allows indexing of multiple cameras to a single input command (for example: immediately monitor all portals from a single relay input from either manual or logical control generation).

**Broadcast Lighting Commands:** Allows single relay input to activate an unlimited number of relay based lighting controller inputs.

Alarm Shunt Commands: Allows remote activation of alarm shunts for perimeter portals.

**Remote Door/Gate Relay Commands:** Allows wireless link to PC and Net based access control systems, as well as traditional board, and PLC based systems for remote control of perimeter pedestrian, drive, barrier, and crash barrier gate systems.

**Broadcast Lockdown Commands:** Broadcast feature allows for total lockdown utility for all perimeter portals via single relay input from either manual or logical command generation.

### **Broadcast Emergency Release Commands:**

Broadcast feature allows for total open/release utility for all perimeter portals via a single relay input from either manual or logical command generation in the case of emergency.

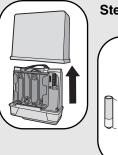
**Alarm Input Commands:** Allows wireless link to any relay based alarm inputs for PC and Net based DVR, Access Control, and Alarm Systems, as well as traditional board, and PLC based systems.

**Perimeter Monitoring Relay Commands:** Allows wireless link from literally any relay based perimeter sensor including IR, Motion, Shaker, Inductance, Fiber Optic, and Optical, to any relay based alarm inputs for PC and Net based DVR, Access Control, and Alarm Systems, as well as traditional board, and PLC based systems.

**Array Development:** Extreme low power consumption, digitally secure wireless engineering allows for rapid development, deployment, and evolution of complex system arrays over any project site, with extreme scalability, and flexibility of power sourcing.

# **Installation & Programming**

## PHN11

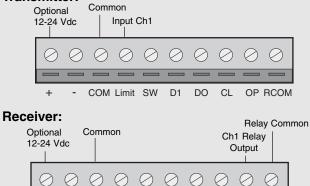


Step 1: Remove cover.

Step 2: Install 4 AA Alkaline batteries (not provided). (Lithium batteries recommended for colder environments.)

PHN11 can be either a Transmitter or a Receiver. Dipswitch #5 controls whether the module will be a Transmitter or a Receiver.

#### Transmitter:



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**Step 3:** To make one of the modules the Receiver, set Dipswitch #5 to the ON position.

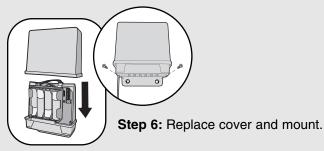


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**Step 4:** Press the Learn button on the Receiver.

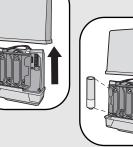
**Step 5:** Within 5 seconds, press the Learn button on the Transmitter.

The LED will blink 3 times indicating programming is successful. The LED on the Transmitter will go out after activation, indicating that it is ready to be programmed to additional Receivers, if any. **NOTE:** The LED on Receiver will blink a total of 12 times to indicating programming has failed.



PHN21

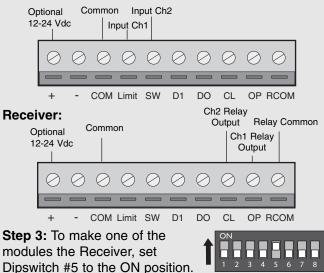
Step 1: Remove cover.



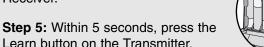
**Step 2:** Install 4 AA Alkaline batteries (not provided). (Lithium batteries recommended for colder environments.)

PHN21 can be either a Transmitter or a Receiver. Dipswitch #5 controls whether the module will be a Transmitter or a Receiver.

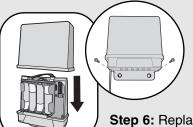
#### Transmitter:



Step 4: Press the Learn button on the Receiver.



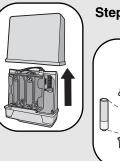
Step 5: Within 5 seconds, press the Learn button on the Transmitter. The LED will blink 3 times indicating programming is successful. The LED on the Transmitter will go out after activation, indicating that it is ready to be programmed to additional Receivers, if any. **NOTE:** The LED on Receiver will blink a total of 12 times to indicating programming has failed. To form a network, receivers must be activated to a



Transmitter before they will work.

Step 6: Replace cover and mount.

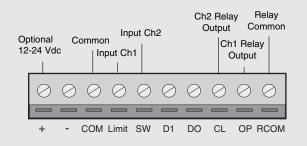
## PHN22



Step 1: Remove cover.

**Step 2:** Install 4 AA Alkaline batteries (not provided). (Lithium batteries recommended for colder environments.)

PHN22 are designed to work as a pair and can be a Transmitter and a Receiver. To form a network between the two modules, they must be programmed to each other.



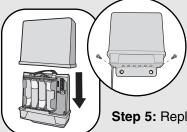
**Step 3:** Press the Learn button on the Receiver.



**Step 4:** Within 5 seconds, press the Learn button on the Transmitter.

The LED will blink 3 times indicating programming is successful.

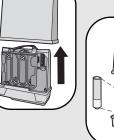
**NOTE:** The LED on Receiver and Transmitter will blink a total of 12 times to indicating programming has failed.



Step 5: Replace cover and mount.

## PHNRPT

Step 1: Remove cover.



**Step 2:** Install 4 AA Alkaline batteries (not provided). (Lithium batteries

colder

recommended for

environments.)

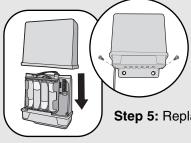
**Step 3:** Press the Learn button on the PHNRPT.

**Step 4:** Within 5 seconds, press the Learn button on the Receiver.



The LED will blink 3 times indicating programming is successful.

**NOTE:** The LED on Receiver and Repeater will blink a total of 12 times to indicating programming has failed.



Step 5: Replace cover and mount.

# Troubleshooting

### The modules only work part of the time.

Ensure that Dipswitch #6 is set to the same position on all Phantom modules.

# Operation

**NOTE:** A momentary short between terminals "Common" and a "Channel Input" on the transmitter will trigger the corresponding relay on the receiver. (For example, a short between Common and Channel 1 Input triggers Relay 1 on the receiver.)

## **Operating Modes**

**Regular Mode:** Provides faster response, but shorter battery life. To set any Phantom module into Regular Mode, set Dipswitch #6 to the OFF position (default). **Power-Save Mode:** Provides longer battery life, but slower response. To set any Phantom module into Power-Save Mode, set Dipswitch #6 to the ON position.

**NOTE:** All modules must be set to the same operating mode to work successfully.

## **Relay Modes**

PHN11 has 1 relay while PHN21, and PHN22 have 2 relays.

**NOTE:** Default mode for Relay is 1 second ON. When using the Toggle Mode, it is recommended to power the unit with an external power supply.

#### Relay 1:

Dipswitch	Dipswitch	Mode
#1	#2	of Operation
OFF	OFF	1 Sec ON
OFF	ON	3 Sec ON
ON	OFF	10 Sec ON
ON	ON	Toggle

#### Relay 2:

Dipswitch	Dipswitch	Mode
#3	#4	of Operation
OFF	OFF	1 Sec ON
OFF	ON	3 Sec ON
ON	OFF	10 Sec ON
ON	ON	Toggle

### **Clear Memory**

To reprogram a Phantom module the memory must be cleared. To clear memory, press the Learn button until the LED blinks a total of 6 times.

**NOTE:** The LED will remain ON while the memory is clearing.

### FOR TECHNICAL SUPPORT DIAL OUR TOLL FREE NUMBER: 1-800-528-2806

#### www.liftmaster.com

NOTICE: To comply with FCC and or Industry Canada rules (IC), adjustment or modifications of this receiver and/or transmitter are prohibited, except for changing the code setting or replacing the battery. THERE ARE NO OTHER USER SERVICEABLE PARTS. Tested to Comply with FCC Standards FOR HOME OR OFFICE USE. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.