

# PRO-TEC SYSTEM ONE

## Trailer Security Systems



Photo includes System One Plus pager unit.

***“Professional Technology to  
Pro-Tec Your Investment”***

---

---



# *Congratulations*

*on your purchase of  
a state-of-the-art  
trailer security system.  
This system has been  
designed to  
provide years of  
trouble-free operation.*

---

---

# What It Does

---

---

The Pro-Tec System One is designed to monitor and protect your trailer and its contents while at a race, job site, rest stop, hotel, restaurant, etc. This is accomplished by door switches and an adjustable shock sensor. Any movement of the trailer or opening of a door will trigger the alarm. This will cause the electrical brakes of the trailer to be applied, running lights will then flash, and the siren will sound. If you have the optional pager system, the pager will be notified up to one mile away, thus alerting you of a potential problem.

This device complies with part 15 of FCC rules. Operation is subject to the following 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.

**This Owner's Guide** should help you get the most out of your system. Please take the time to read it thoroughly, prior to using the system.

---

---

# What Is Included

---

---

- Control module
- Two transmitters
- Siren
- Brake safety toggle switch
- 3- Pin type door switches
- 3- Door switch brackets
- Mounting screws
- 5- Crimp connectors
- 1-Double membrane entry seal
- Insurance rebate card
- Warranty card
- 2- Vinyl Decals

## ***Pro-Tec System One Plus Package includes:***

All the above plus:

- Pager and base unit
- Manual page button

## **Optional Equipment:**

- Momentary Key Switch N/O
- LED Light

**Note: Pager requires AM/FM antenna (not included).**

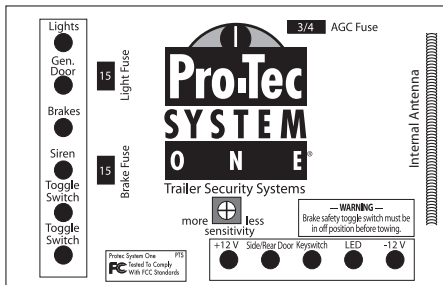
---

---

# Control Box

- Recommended Mounting Position  
High on the front wall. The higher the control box is mounted the better the reception would be.
- Wire Routing  
Use one of the punch outs near either terminal block. Snap in the double membrane entry seal to the hole you punched out.
- Cut the dimple off the outer side of the entry seal.
- Pass the wires thru entry seal and route to designated terminal block position.

**Note: Wires must be kept away from the internal antenna.**



**Control Box  
Outside  
Dimension:**

**5.12" Length  
3.70" Width  
2.24" Depth**

# Installing Alarm

---

---

## ■ STEP ONE

Deciding on component locations

## ■ SIREN

1. Keep it away from heat sources.
2. Mount it where a thief cannot easily disconnect it.
3. Point siren down so water does not collect in it.

## ■ CONTROL UNIT

1. Mount securely inside trailer.
2. The higher the control unit is mounted in the trailer, the better the transmitter range will be.

## ■ SWITCHES

1. Mount pin switch.
2. Make sure switch bracket is mounted to trailer and properly grounded.

## ■ OPTIONAL EQUIPMENT

1. Mount pager AM/FM antenna outside of trailer.

**Note: AM/FM antenna not included. If Trailer has existing AM/FM antenna both radio and pager can use the same antenna.**

---

---

---

---

## ■ WIRING

1. Route wiring through trailer so chaffing and/or pinching will not occur.
2. Solder or crimp connectors are trouble free if done properly.
3. Insulate all connections with shrink tube or quality electrical tape.
4. When wiring control box keep wires away from internal antenna.

## ■ INSTALLATION

1. Installation of 12 volt full size automotive battery, grounded to trailer and kept charged is needed for proper operation.
2. Use 20 gauge wire from door switches to control unit. Use separate wire for each door and connect to terminal block marked for that door.
3. Connect 14 gauge wire from trailer running lights circuit to terminal block.  
*NOTE: The control unit is able to handle 15 amp load.*
4. Connect 14 gauge wire from positive side of trailer brake to brake output terminal

**Note: 12 Volt automotive battery must be grounded to trailer chassis.**

---

---

- 
- 
5. Mount brake safety toggle switch. Connect switch to terminal block marked toggle switch.
  - 5a. If brake safety toggle switch is left in the on position before towing siren will sound upon brake compression.  
(on most factory vehicles)

**IMPORTANT: The brake safety switch must be turned off before trailer is to be towed. This switch is to prevent accidental trailer brake activation while towing.**

**NOTE: *If this switch is not installed, the alarm brake feature will not work.***

6. Connect siren (red wire) to control module terminal block, connect (black wire) to trailer ground.
7. Connect 12 gauge wire from negative battery terminal to control module terminal block.
8. Connect 12 gauge wire from positive battery terminal to control terminal block.
- 8a. Improper wiring of 12V positive or negative wire will damage unit.

*For Pro-Tec System One Plus package:*

9. Connect pager to control unit.

Follow Pager Instructions.

---

---

# Testing Alarm

---

---

Close ALL doors and press the button or turn the key switch.

1. Trailer lights should flash once.
2. Alarm in now armed.
3. Open side door
  - a. Running lights are flashing.
  - b. Siren is sounding.
  - c. Brakes are engaged.
  - d. Optional Pager will sound.\*
  - e. Press button once or turn key switch to disarm alarm.
  - f. Trailer lights will flash twice.

**Repeat above sequence to test all doors.**

4. Setting sensitivity on Shock Sensor
  - a. Turn set screw to halfway point.
  - b. Place 2X4s a few feet in front of the tow vehicle wheels and tow trailer over 2X4s.
  - c. Counterclockwise more sensitive.

Further adjustment might be necessary according to your environment.

**\*Pro-Tec System One Plus only.**

---

---

# Nuisance Prevention Circuitry



Your system has Nuisance Prevention Circuitry (NPC). It prevents annoying repetitive trigger sequences due to faulty door pin switches or environmental conditions such as thunder, jackhammers, airport noise, etc.

***Here's how it works:***

Lets say the alarm triggers two times. NPC will interpret this pattern of triggers as false alarms. NPC ignores or bypasses that sensor or switch (along with any other sensors or switches sharing the same zone).

This ensures that a sensor that continuously triggers will remain bypassed.

---

---

# Using Your System

---

---

## **ARMING**

You can turn on, or arm, the system by pressing the transmitter button or turning the key switch. When the system is armed, you will see the running lights flash once.

## **DISARMING**

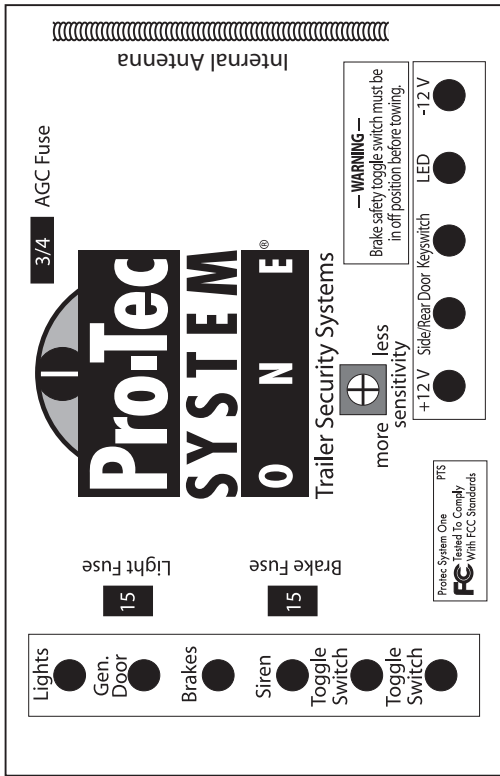
1. Press button or key switch once.  
Running lights will flash twice.  
Trailer is now disarmed and safe to enter.
2. **If siren is sounding**  
Hold button or key switch once.  
This will silence the siren and stop the running lights flashing.
3. Once the system is disarmed after the alarm has been triggered, it will display what set the alarm off. After the two flashes for the disarm and a two second pause, it will display:
  1. One flash for the side door
  2. Two flashes for the generator door
  3. Three flashes for the shock sensor. To adjust the shock sensor simply turn the potentiometer. To make the unit more sensitive, turn the dial to the left and to make it less sensitive, turn it to the right.

After these codes are displayed, they are erased from memory so the user should look for these codes when disarming the system.

---

---

# Wiring Diagram



Specifications:

Voltage Max:

Operating Temp:

Current:

15VDC

185 degrees

7 Milliamps (armed)

19 Milliamps (with optional LED)

# Warranty

---

---

TOMAL Systems, LLC promises to the ORIGINAL PURCHASER to repair or replace (with a comparable model) any electronic control module which proves to be defective in workmanship or material under normal use for life. If warranty service is necessary you must have a clean copy of your sales receipt.

This warranty is void if the product has been damaged by accident, unreasonable use, neglect, improper service or other causes not arising out of defects in materials or construction. This warranty is nontransferable and does not apply to any unit that has been modified or used in a manner contrary to its intended purpose and does not cover batteries.

The unit in question must be returned to the manufacturer, postage prepaid. This warranty does not cover labor costs for the removal, diagnosis, troubleshooting, removal or installation of the unit.

These systems are a deterrent against possible theft. TOMAL Systems LLC is not offering a guarantee or insuring against the theft of the trailer or its contents, and disclaims any liability for the theft of the trailer and/or its contents. TOMAL Systems LLC does not authorize any person to create for it any other obligation or liability in connection with the security system.

---

---

---

---

“TO THE MAXIMUM EXTENT ALLOWED BY LAW, ANY AND ALL WARRANTIES ARE EXCLUDED BY THE MANUFACTURER AND EACH ENTITY PARTICIPATING IN THE STREAM OF COMMERCE THEREWITH. THIS EXCLUSION INCLUDES BUT IS NOT LIMITED TO, THE EXCLUSION OF ANY AND ALL WARRANTY OF MERCHANTABILITY AND/OR ANY AND ALL WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND/OR ANY AND ALL WARRANTY OF NON-INFRINGEMENT OF PATENTS IN THE UNITED STATE OF AMERICA AND/OR ABROAD. NEITHER THE MANUFACTURER OR ANY ENTITIES CONNECTED THEREWITH SHALL BE RESPONSIBLE OR LIABLE FOR ANY DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO, AND CONSEQUENTIAL DAMAGES, INCIDENTAL DAMAGES, DAMAGES FOR LOSS OF TIME, LOSS OF EARNINGS, COMMERCIAL LOSS, LOSS OF ECONOMIC OPPORTUNITY AND THE LIKE. NOTWITHSTANDING, THE ABOVE MANUFACTURER DOES OFFER A LIMITED WARRANTY TO REPLACE OR REPAIR THE CONTROL MODULE AS DESCRIBED ABOVE”.

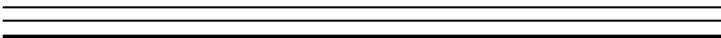
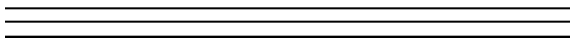
## Important Note

A product's warranty is automatically void if its serial number is defaced, missing, or altered.

---

---

Notes:



**Serial #** \_\_\_\_\_

**Date Installed** \_\_\_\_/\_\_\_\_/\_\_\_\_

**Purchased From:** \_\_\_\_\_



**888-741-1004**

**252-633-4584**

**252-636-5704 Fax**

