

# PRO-TEC SYSTEM ONE

## Trailer Security Systems



Photo includes System One Plus pager unit.

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

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# *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.*

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# What It Does

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The Pro-Tec System One is designed to monitor and protect your trailer and its contents while at a race, rest stop, hotel, restaurant, etc. This is accomplished by door switches and a 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 12 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.

**The system requires no specific maintenance.**

Your remote control is powered by a miniature 12 v. battery, type GP23A, that will last about a year under normal use. When the battery weakens, operating range will be reduced and the LED on the remote light will dim.

**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.

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# What Is Included

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- Control module
- Two transmitters
- 128db Siren
- Brake safety toggle switch
- 3- Pin type door switches
- 3- Door switch brackets
- 1- Seal tite connector
- Mounting screws
- 3- Crimp connectors
- 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
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# Installing Alarm

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## ■ 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 antenna outside of trailer.
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## ■ 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. Never twist and tape wires together without soldering.

## ■ 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 12 gauge wire from trailer running lights circuit to terminal block.  
*NOTE: The control unit is able to handle 20 amp load.*
  4. Connect 12 gauge wire from positive side of trailer brake circuit to terminal block.
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5. Mount brake safety switch in convenient and secure location. Connect switch to terminal block.

**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.  
*NOTE: When alarm is first powered up the siren will sound. Press the remote button #1 twice. First time will silence alarm, second will shut off alarm. Then press reset button on alarm box. LED light should now be off.*

*For Pro-Tec System One Plus package:*

9. Connect pager to control unit.

Follow Pager Instructions.

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# Testing Alarm

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Close ALL doors and press button #1 once.

1. Trailer lights should flash once.
2. Alarm is 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 #1 once to silence siren.  
Note: Alarm is still armed.
  - f. Press button #1 again to disarm alarm.
  - g. Trailer lights will flash at least 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.

Further adjustment might be necessary according to your environment.

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

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# Nuisance Prevention Circuitry

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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 three times. Each time the same sensor or switch is triggering the alarm. The three triggers are within 60 minutes of each other. NPC will interpret this pattern of triggers as false alarms. After the third trigger, NPC ignores or bypasses that sensor or switch (along with any other sensors or switches sharing the same zone).

If the bypassed sensor tries to trigger the system while it is being bypassed, the 60-minute bypass period will start over. This ensures that a sensor that continuously triggers will remain bypassed.

Doors are covered by NPC differently: If the alarm is triggered by an open door for three full cycles (one and one half minutes), the doors will be bypassed until the trigger ceases.

*NOTE: Arming and disarming the system does not reset this function! The only ways to reset a bypassed zone are for it to not trigger for 60 minutes or disconnect power to the control module and re-connect power.*

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# Using Your System

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## **ARMING**

You can turn on, or arm, the system by pressing button #1 of your transmitter. When the system is armed, you will see the running lights flash once.

## **DISARMING**

### **1. If siren is not sounding**

Press button #1 once.

Running lights will flash at least twice.

Trailer is now disarmed and safe to enter.

### **2. If siren is sounding**

Press button #1 once.

This will silence the siren and

stop the running lights flashing.

### ***Note. Trailer alarm is still armed.***

Press button #1 again, this will flash the running lights at least two times.

Trailer is now disarmed and safe to enter.

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# High Security Disarm

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Your system includes a High Security Disarm feature. During the trigger sequence, using the transmitter to disarm the system will only stop the trigger sequence (the alarm will stop and the running lights will stop flashing). However, the system will remain armed. This is extremely useful if you must stop the system from sounding but are unable to check the trailer visually. The trigger will stop but the trailer will remain armed.

## **Optional Pro-Tec System One Plus**

Pager will notify you of alarm up to 1 mile away. There is also a pager key pad that can be used to notify pager without having alarm trigger.

**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.***

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# Troubleshooting

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## ***Shock sensor doesn't trigger alarm***

Has the NPC system been triggered? To check this press reset to clear the NPC memory and then retest the shock sensor.

## ***LED indicator flashing sequence***

This feature is used to tell you if and what trigger point was triggered while you were away. It also helps determine where to look if you are experiencing false alarms.

1. Steady Flashing .....System armed
2. No Flashing.....System disarmed
3. One Flash .....Generator door
4. Two Flashes .....Shock sensor
5. Three Flashes .....Side or rear door

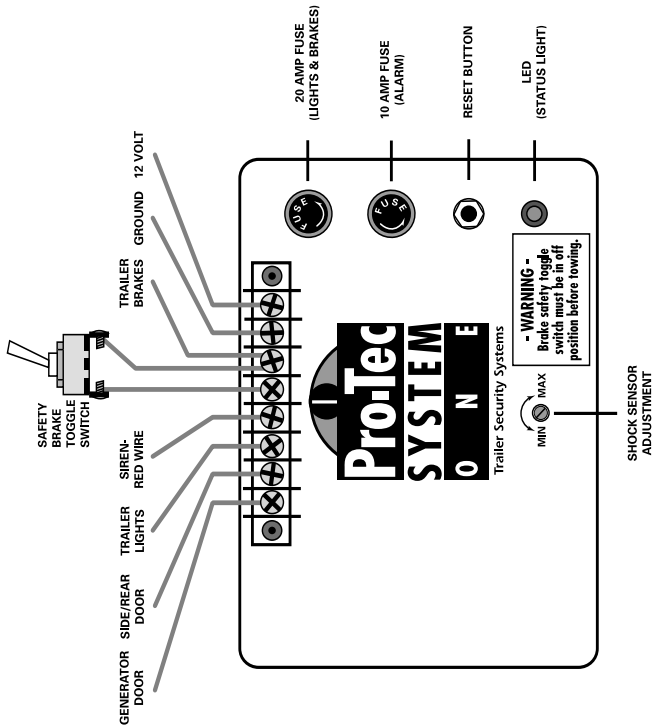
## ***To reset LED indicator***

Disarm alarm. Then press reset button on control module. LED should shut off.

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# Wiring Diagram



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# Warranty

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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.

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“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, or if the black box is separated from outer box or entered.

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

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

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



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