

# HORNT

# 77

ULTIMATE  
SECURITY  
FOR  
YOUR CAR

## OWNER'S MANUAL

This device complies with part 15 of FCC rules. Operation of this device is subject to the following two conditions: 1. This device may not cause harmful interference. 2. This device must accept any interference that may cause undesired operation.  
NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

# THORN

## LIMITED LIFE TIME WARRANTY

**Alarm 1**, Div. of OFT Inc., guarantees to the original purchaser of the Thorn auto security system to repair or replace any electronic control module, If the said parts are found defective in workmanship or material under normal use during the lifetime of the automobile in which the alarm system is originally installed. It needs to be proved that the alarm system was installed property and serviced by an authorized agent. In the event warranty service is needed, you must provide a clear copy of your sales receipt containing date of purchase, your full name and address, authorized agent name and address, alarm type, automobile license number, vehicle identification number and all security options installed. This warranty is void if the alarm system has been damaged by accident, unreasonable or unintended use, not reasonably maintained, utilized in commercial or industrial operation, or service by anyone other than **Alarm 1** or its authorized agent. This warranty does not cover labor costs for the removal and reinstallation of the unit, and batteries. This warranty is not transferable and does not apply to any unit that has been modified or used in a manner contrary to its intended purpose. The defective unit must be returned to the manufacturer, postage prepaid, with the bill of sale or other dated proof of purchase. **Alarm 1** does not warrant or guarantee against break in damage or the theft of the vehicle in part or whole or against the loss or damage to the contents of any vehicle in which a security system is installed. Thorn auto security systems are a deterrent against possible theft. **Alarm 1** or its authorized agents will not be liable to anyone for consequential or incidental damages or claims due to failure of product. Warranty only applies to replacement or repair of the product if all the conditions mentioned above are met. No expressed warranty or implied warranty is given except those set forth herein.

THORN

***77***

ULTIMATE  
AUTO  
SECURITY

INSTALLER'S MANUAL

## **1. RED**

The alarm's red wire with the 15 amp fuse is connected to the vehicle's positive battery terminal or a constant positive (+)12 volt supply.

## **2. BLACK**

Connect the alarm's black wire to a good chassis ground.

## **3. ORANGE/STARTER KILL RELAY (PRE-WIRED)**

The orange wire is a negative (-)500mA output when the alarm system is in the armed mode (ground when armed). the orange wire (ground when armed) output may also be used to interface options such as voice modules, pages, window roll up modules, etc. Note: When connecting more than one option to the orange wire a diode is recommended.

## **4. WHITE/GREEN**

The white/green wire is the alarm's (-)500mA for all door unlock. The control module comes factory preset as negative (-)500mA output and may be changed to positive (+)500mA output via B jump.

## **5. WHITE**

The white wire is a positive output from on-board light flash relay. The white wire may be connected to vehicle's parking light wire at the dash switch. This wire may also be connected directly to any parking light fixture. Do not connect to the headlights.

## **6. SKY BLUE**

Pre-warning for option.

## **7. WHITE/BLACK (RELAY REQUIRED)**

The white/black wire is the alarm's negative (-)500ma dome light output. It must be used with a relay to turn on the vehicle's interior lights for 20 seconds when the alarm is disarmed.

## **8/14. VIOLET OR GREEN**

The violet(+) or green(-) wire is for input door switch. The best place to find the door trigger is either at the pin switch or at the dome light. The most vehicles are set for (-)negative trigger. Note: ford vehicles commonly are positive trigger. Make sure all the doors are controlled.

## **9. WHITE/BLUE (RELAY REQUIRED)**

This wire is the alarm's third channel negative (-)500mA output. Channel 3 is activated by pressing button 1 and 2 at the same time.

## **10. BLUE**

The blue wire is for (-) trunk trigger. This trigger input is bypassed when channel 2 output is used. The trunk may be opened remotely without disarming the system.

## **11. RED/WHITE (RELAY REQUIRED)**

The red/white wire is the alarm's negative (-)500mA channel 2 output. This momentary output switches to ground when the no, 2 button of the remote control is pressed. It may be used with a relay for remote trunk release, or may be used to trigger another optional feature.

## **12. YELLOW**

Connect the yellow wire coming out of the starter kill socket to the true ignition. This is ignition power that stays on when in start mode. Use a volt meter to locate proper wire. Do not connect to Accessory.

## **13. BROWN**

Connect the brown wire to the brown wire of the siren. The siren's black wire should be connected to ground. For corrosion resistance the black wire should be connected inside the vehicle under the dash.

# SELF CODE LEARNING SYSTEM

Thorn is equipped with a computerized security code system. This unique feature memorizes the code number for your system and expands with another remote transmitter very easily.

## SELF CODE LEARNING:

Thorn will learn the code in valet mode as follow

### CODE LEARNING IN VALET MODE:

1. Turn ignition key to "on" position.
2. Press the valet switch "on" for 2 seconds then L.E.D. "on".
3. Turn ignition key to off/on/off/on/off/on/off within 10 seconds then L.E.D. flashing, two chirps.
4. Press the button #1 or #2 of the remote control for first transmitter code learning then L.E.D. "on" with two chirps sound to confirm acceptance.
5. Press the button #1 or #2 of the remote control again for second transmitter code learning then L.E.D. "off" with two chirps sound to confirm acceptance.

## CODE HOPPING SYSTEM

For second car operation, if press the button #2 for code learning, system only can use the Arm/Disarm feature with the remote control button #2.

# **ARM AND DISARM THORN**

## **THORN MAY BE ARMED IN 3 DIFFERENT WAYS.**

1. Remote Control with Chirp: Press button 1 of the remote control to arm, 1 chirp & 1 light flash.
2. Remote Control with no Chirp: Briefly press button 2 of the remote control before pressing button 1 to arm silently, no chirp & 1 light flash.
3. Automatic passive arming: 30 seconds after the last door is closed, Then will arm, 1 chirp & 1 light flash.

## **THORN MAY BE DISARMED IN 2 DIFFERENT WAYS.**

1. Remote control with Chirp: Press button 1 of the remote control to disarm, 2 chirps and 2 light flashes.
2. Remote control with no chirp: Briefly press button 2 of the remote control before pressing button 1 to disarm, no chirp and 2 light flashes.

## **THORN CAN OPERATE SECOND CAR.**

1. Press the button #2 for code learning.
2. Second car can only use the Arm/Disarm feature with the remote control button #2.

# PANIC MODE

## FOR YOUR PERSONAL SAFETY

Thorn may be triggered by the remote control. Press button 1 until Thorn's siren blasts for about 3 seconds, then release the button. When panic mode is activated, Thorn will sound for a complete 60 seconds cycle. Pressing button 1 once more will deactivate panic mode. For your personal safety, panic mode will be activated even when Thorn is in valet mode.

# VALET MODE

Valet mode is designed to prevent Thorn from arming or triggering when the protection is not needed. Then should be put into valet mode when your vehicle is being serviced. Valet mode may also be used as a manual disarm of Thorn if the remote control is not operative or lost. To activate valet mode, turn vehicle's ignition to "on" and push in valet switch for 2 seconds. The L.E.D. will be constant red light. To deactivate valet mode, repeat the process. The L.E.D. will be off. The valet switch is usually hidden inside your vehicle. (Ask your installer for the location of the valet switch)

*If Thorn stops working, check the L.E.D. If it is constant red light, Thorn is in valet mode.*

# CAR FINDER

Press the remote control button #2 twice when the Thorn system is armed then Thorn will chirp three times with siren sound and flashing parking light.

# ALL DOORS UNLOCK

Press the remote control button #2 within 3 seconds after the Thorn system is disarmed by transmitter button #1.

# L.E.D. STATUS LIGHT

Thorn's armed status is reported by the flashing L.E.D. light located inside the vehicle. This light is off when Thorn is disarmed and is on constant red when Thorn is in valet mode.

# L.E.D. INDICATOR

|                    |                          |
|--------------------|--------------------------|
| Flashing Red&Green | Armed                    |
| Off                | Disarmed                 |
| On Constant Red    | Valet Mode               |
| Rapid Red Flash    | Passive Arming Countdown |

# ALARM MEMORY

If Thorn is set off while you are away, it will disarm with 4 chirps and 4 light flashes. The L.E.D. light will indicate which zone was triggered. The L.E.D. reports with green and red flashes as follows. G-Green, R-Red

|                  |            |
|------------------|------------|
| IGNITION TRIGGER | RRRR-GGGG- |
| Door Trigger     | RRR-GGG-   |
| Trunk Trigger    | RR-GG-     |
| Shock Trigger    | R-G-       |

# SHOCK DELETE VIA REMOTE

Press the remote control button #2 within 3 seconds after the Thorn system is armed by transmitter then Thorn will chirp once.

# Valet Mode Via Remote

Press the button #1 & #2 simultaneously of the remote control for 5 seconds

- 1 chirp (L.E.D. on) : Valet mode
- 2 chirps (L.E.D. off) : Valet mode off

# OPTIONAL FEATURES

## REMOTE LOCK AND UNLOCK

Thorn may be interfaced with your vehicle's power lock. This feature will lock the doors of your vehicle when Thorn is armed. It will also unlock the doors when Thorn is disarmed.

**NOTE:** *Some vehicles may require additional components. The remote lock and unlock feature will operate even in valet mode, always providing keyless convenience.*

## IGNITION CONTROLLED LOCK AND UNLOCK

When the ignition lock and unlock feature is installed the vehicle doors will lock automatically when the ignition is turned on and automatically unlock when the ignition is turned off.

## INTERIOR LIGHT CONTROL

The alarm may be interfaced with the interior lights of your vehicle. When Thorn is disarmed, the vehicle's interior lights will turn on for 30 seconds. The interior lights will turn off after 30 seconds or when the ignition is turned on.

## SECOND CHANNEL

Button 2 on the remote control may be used for remote trunk release or other optional features. (i.e. remote car starter, window roll up, etc.) Press button 2 of the remote control over 2 seconds to activate.

## THIRD CHANNEL

By pressing buttons 1 and 2 simultaneously, the third remote controlled option will be activated. (i.e. remote car starter, window roll up, etc.)

## REMOTE CONTROL BATTERY REPLACEMENT

Your remote control is powered by a 12 volt battery which will last about 1 year. It automatically indicates a need to replace the battery by either showing dim L.E.D. light on the remote control or reducing operative remote range to 10 ft or less. (Battery is commonly available at any drug store. If you have a trouble locating a battery, please contact your dealer.)

## L.E.D. INDICATOR

Mount the L.E.D. indicator in visible location, such as dash or console. The lens may be unsnapped for easy installation. Plug the L.E.D. into the control module.

## SHOCK SENSOR

Firmly mount the shock sensor under the dash and plug it into the control module.

## FIRST STAGE

1. Siren: Sounds for 1 second 2 times..
2. Parking light flashes for 5 seconds.
3. L.E.D.: Red light flashes for 5 seconds.

## SECOND STAGE

1. Siren sounds for 30 seconds.
2. Parking light flashes while siren sounds.
3. L.E.D.: Red light flashes.

## BLUE AND GREEN 2 PIN PLUG

The blue and green 2 pin plug is the alarm's door lock/unlock output. The blue wire is for lock and the green wire is for unlock for 2 wire negative (-) systems. To determine which type of door locks the vehicle has, remove power door lock switch from the door panel. Test the door lock wires with a voltmeter.

## PROGRAMMABLE FEATURES

To change any factory setting

1. Turn the ignition key "on" position
2. Press the valet switch "on" for 2 seconds then L.E.D. "on"
3. Turn the ignition key "off" position
4. Press the valet switch 3 times like as on/off/on/off/on/off/on/off then long chirps.

Select the following programmable features 2 seconds after above procedure.

| PRESS THE REMOTE BUTTON |                           |            |
|-------------------------|---------------------------|------------|
|                         | # 1                       | # 2        |
| ONE CHIRP               | PASSIVE ARM               | ACTIVE ARM |
| TWO CHIRPS              | PASSIVE DOOR LOCK         | "off"      |
| THREE CHIRPS            | IGNITION DOOR LOCK/UNLOCK | "on"       |
| FOUR CHIRPS             | CHIRP SOUND "on"          | "off"      |
| FIVE CHIRPS             | SIREN DURATION 30 SEC.    | 60 SEC.    |
| SIX CHIRPS              | REMOTE ANTI-HIJACK "off"  | "on"       |
| SEVEN CHIRPS            | 3CH OUTPUT MOMENTARY      | LATCH      |

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- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

**FCC ID : HH8-DYHOP200-TX**

**Caution:**

Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.