

**NEW for 2025** 

# DIGI∞LINK PREMIUM SERIES

# 540H

KÉYLESS-CONTROLLED SECURITY



# ANTI-THEFT LOCKDOWN TECHNOLOGY

PREVENTS:

Relay Attacks, Code Grabbers, CAN Injection & Game Boy attacks (see pg.11)



# **Models Covered in this Manual**

- 540H(R0): Horn Relay (no Siren), no Shock Sensor
- 540H(R4): Horn Relay (no Siren), 318-054 Shock Sensor
- 540H(S0): KR22-1 Siren, no Shock Sensor
- 540H(S4): KR22-1 Siren, 318-054 Shock Sensor

**NOTICE!** Although reasonable efforts have been taken to ensure accuracy in this Owner's Guide, KIRAMEK Inc. shall not be held liable for any errors, omissions, property damage, or injury resulting from the use of this information.

All product specifications and features are subject to change without notice.

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# LIMITED LIFETIME WARRANTY

The SCIBORG 540H <u>Control Module</u> is backed by a limited lifetime warranty against defective components and/or improper product assembly to the original purchaser for as long the vehicle is owned by that same purchaser, contingent upon installation by an Authorized SCIBORG Dealer. All product warranties become void if the SCIBORG 540H system was not sold and installed by an Authorized SCIBORG Dealer or the system is moved to another vehicle. <u>All other parts and/or accessories</u> that connect to SCIBORG 540H systems, including but not limited to the Siren, Shock Sensor and LED Program Switch, are warranted for one (1) year from the original date of purchase.

During the warranty period, KIRAMEK Inc. will repair or replace, at its sole discretion, any system component that is found defective in material or assembly during the warranty period, provided that the product is returned to KIRAMEK Inc. by an Authorized SCIBORG Dealer and is accompanied by a clear and legible copy of the original purchaser's receipt. Any damage to your SCIBORG 540H system that results from normal wear-and-tear, accidents, improper use, neglect, faulty wiring, incorrect installation, modification, removal or defacement of the product serial number, alteration or repair outside KIRAMEK Inc or its Authorized SCIBORG Dealers voids this warranty.

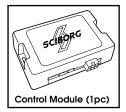
This warranty is limited to defective parts only and does not provide any compensation whatsoever for damages associated with the SCIBORG 540H system or its accessories. This warranty does not cover installation labor, product removal and/or reinstallation fees. This warranty is valid for the original purchaser only and may not be transferred to another party. KIRAMEK Inc makes no warranty against theft or vandalism of the vehicle in which the SCIBORG 540H system was installed. This warranty shall not be interpreted as an insurance policy against loss, nor shall KIRAMEK Inc be liable any in way for such loss, financial or otherwise.

**★WARNING!** DO NOT ATTEMPT TO INSTALL THIS SCIBORG 540H PRODUCT YOURSELF BECAUSE SUCH WILL IMMEDIATELY VOID THE WARRANTY. THIS SECURITY SYSTEM MUST BE PROFESSIONALLY INSTALLED BY YOUR AUTHORIZED SCIBORG DEALER TO VALIDATE YOUR WARRANTY.

KIRAMEK may opt to validate the above Warranty, in writing, for shipments outside Japan, in cases where there is no local SCIBORG Dealer available to perform the install.



# INCLUDED ITEMS

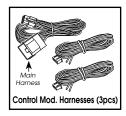


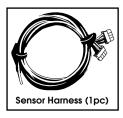














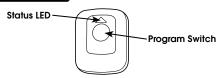








# **LED Program Switch Parts**



# ARMING & DISARMING =

# ARMING A

#### NORMAL ARMING

Close all doors and then LOCK by your factory keyless remote or by SmartKey door handle touch. Hazard lights will flash, doors will lock, and the siren will chirp 1 time (if Confirmation Chirps are ON). The Status LED will light for 5s, during which time all triggers are disabled. Then the Status LED will start flashing and Ignition, Door, Trunk and Hood triggers become enabled. The Shock Sensor (and any



other external sensor) is enabled 5s after the LED starts flashing (10s after you Lock).

#### SENSOR BYPASS ARMING



This procedure lets you temporarily disable the Shock Sensor for a single Arming session:



- 1) With Ignition OFF, press the Program Switch twice.
- 2) Within 20s, press **LOCK** on the factory remote to Arm.

The siren will chirp 2 times, and all triggers (door, IG, etc.) will be active except the shock sensor and any other external sensors. Note that when you Disarm and then Arm again normally, the shock sensor will be enabled.

# CONFIRMATION CHIRPS (ON by default)

PROGRAMMABLE W





This procedure lets you enable or disable the Arm/Disarm chirps. (Note that the siren will still go off when the 540H is triggered.)



- 1) With Ignition OFF, press the Program Switch once.
- 2) Within 20s, press **LOCK** on the factory remote to Arm.

The confirmation chirp state has now toggled and the system is Armed. Repeat the above procedure to toggle the confirmation chirp state back again.



# DISARMING 1

#### NORMAL DISARMING

UNLOCK by your factory keyless remote or by SmartKey door handle touch. Vehicle hazard lights will then flash, doors will unlock, the siren will chirp 3 times (if Confirmation Chirps are ON), and the Status LED will turn off. The 540H is now Disarmed and you may enter the vehicle.



If the siren chirps 4 times when you Disarm, it means something had triggered while you were away from the vehicle. In this case, the Status LED will flash to tell you what caused the trigger (see Trigger Memory, page 9).

#### REMOTE STARTER NOTE

Some vehicles equipped with remote starters or remote A/C do not allow you to Unlock while the engine is running. In such a case, you will not be able to Disarm the 540H until you shut off the engine.

# /!\ THWART RELAY ATTACKS, CAN INJECTION, ETC. -

You can prevent Relay Attacks, Code Grabbers, CAN Injection & Game Boy Attacks by enabling Feature No.2 or No.6, shown in TABLE-2 on pg.11. NOTE: If your factory remote has only a single Lock/Unlock toggle button, your car is safe from Relay Attacks, but not from all other attacks.

#### DISARMING DURING THE SIREN BLAST

If the siren is triggered by the opening of a door or the back hatch, you should close any open doors or the back hatch before you press Unlock on your factory remote to disarm. The reason is because some cars require doors to be closed before you can Unlock with the factory keyless remote.

Also, if the siren is blasting and the doors are already unlocked, you may not be able to Disarm the 540H with a simple press of Unlock. In such a case, you will need to first press Lock and then press Unlock to Disarm. This is also true in cases where the car's factory remote only has a single Lock/Unlock button—you'll have to push the button twice.

# ARMING & DISARMING =

#### MANUAL DISARMING



You can manually Disarm using a secure code (default = 6). You can change that to your own code (see lower half of this page). IMPORTANT! The RED/WHT wire must be connected to the Brake Pedal or a Switch in order to Manually Disarm!

- 1) Enter the car. (The siren may go off. Door can be left open or closed.)
- 2) Press the Brake Pedal\* the same number of times chosen in Feature No. 11 on page 11, and your final press must be Press-and-Hold! \*Or press the Switch that puts (+)12v on the RED/WHT wire. Install Guide pg.6&8.
- 3) Within 30s, press the Program Switch the same number of times as your Disarm Code. (Factory Default Code = 6)
- 4) Release the Brake Pedal (or Switch). (The 540H will Disarm and the siren will stop. NOTE: You must press UNLOCK then LOCK to Arm.)



#### /!\ NOTE

If the 540H won't Disarm in Step-4 above, it means you either pressed the Brake Pedal incorrectly, or your Disarm Code was wrong. Wait 30s for the Siren to stop, then start over from Step-2.

#### **DISARM CODE CUSTOMIZATION**

PROGRAMMABLE W



The factory code is "6" but you should change it to another number between 1 & 30:

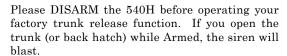
- 1) With all doors closed and the 540H Disarmed, turn ON the Ignition.
- 2) Press the Program Switch for 6s, after which the siren will chirp 3 times.
- 3) Release the Program Switch and turn OFF the Ignition. The Status LED will light for 5s.
- 4) Turn ON the Ignition again (while the LED remains lit for 5s).
- 5) When the LED turns off, wait about 4s and you will see the LED start to flash. Take note of the flashes as the number of flashes will be the number of your Disarm Code. Turn OFF the Ignition to program your code.

The LED will now flash the same number of times as your Disarm Code.

If you have an optional transmitter or pager, you must now relearn them.

# MAIN FEATURES

# TRUNK RELEASE WARNING





# TRUNK TRIGGER



The siren will blast for 30s when the trunk is opened while the system is Armed. Vehicle hazard lights may also flash. See bottom half of pg.4 on Disarming in this case. Also see Table-1, pg.9.



# DOOR TRIGGER \ 🖎



The siren will blast for 30s when any door is opened while the system is Armed. Vehicle hazard lights may also flash. See bottom half of page 4 on how to Disarm in this case. Also see Table-1, pg.9.

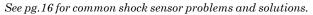


# 2-STAGE SHOCK SENSOR



1st Stage ("Warning Chirps"). Each time the Shock Sensor detects a light impact to the vehicle body, the siren will chirp 5 times. Sensors will not trigger the siren while in Sensor Bypass Mode.

2nd Stage ("Full Trigger"). When the Shock Sensor detects a hard impact to the vehicle body, the siren will blast for 30s (or until Disarmed with the factory remote). Sensors will not trigger the siren while in Sensor Bypass Mode. Also see Table-1, pg.9.



# 5 Chirps



30s Blast



# IGNITION TRIGGER



# PROGRAMMABLE \_\_\_

# IG PROTECT MODE (default)

Siren will blast for 30 sec. if Ignition is turned ON when Armed, except when LIN is connected — Install Guide pg.8. Engine is immo-



bilized. Hazards may flash. <u>If siren is triggered by IG ON</u>: (1) Turn OFF Ignition, (2) Unlock/Disarm, (3) Lock and wait 30 sec., then (4) Unlock.

#### **REMOTE START COMPATIBILITY MODE (RSCM)** (user-programmable)

When the Ignition switches ON while Armed in this mode, the siren will not trigger. Instead, Shock Sensor and Ignition triggers are bypassed, while Door, Hood & Trunk triggers remain active. This allows 3rd party remote starters to start the engine





without triggering the siren. The vehicle is still protected though, and any attempt to open a door or the trunk will trigger the siren. And when the remote starter stops the engine (i.e., Ignition turns off), Sensor and Ignition triggers are automatically re-activated. (See page 11 to program.)



**IIP** (Intelligent Ignition Protect)

IIP activates when you program **RSCM**. The function of IIP is to temporarily switch back to **IG Protect Mode** after a siren trigger.

**Purpose.** Most "remote start / turbo timer" compatible car alarms bypass <u>all</u> trigger inputs *after* the Ignition is switched ON. So if a thief opens a door the siren will trigger; but the thief can then close the door, turn on the Ignition, wait until the siren stops, then drive away in silence because the Ignition-ON state prevents the siren from triggering again! And other car alarms that *always* trigger the siren when the Ignition turns on offer no remote start or turbo timer compatibility at all. *IIP solves this problem by offering <u>compatibility</u> with Remote Start & Turbo Timers, <u>with complete security</u>.* 

**How it works.** Normally, if the Ignition is turned ON while in **RSCM**, the system automatically bypasses the Sensor & Ignition triggers but keeps Door, Hood and Trunk triggers active. But if the 540H is triggered by a Door *before* the Ignition is turned ON, IIP automatically switches back to **IG Protect Mode**, and the siren will be triggered if the Ignition is turned on. Disarming and Arming again will revert to RSCM.

# HOOD TRIGGER



On compatible vehicles (or on any vehicle when the optional analog Hood input is connected), the siren will blast for 30 seconds when the hood is opened while the system is Armed. Vehicle hazard lights may also flash.



# ERROR CHIRP

PROGRAMMABLE ...

If a Door or the Trunk is open when you Lock/Arm, you will hear 1 chirp (only if Confirmation Chirps are ON) followed by 2 chirps (even if Confirmation Chirps are OFF). The 2 chirps are Error Chirps that notify you the doors or the trunk will be bypassed because they are opened (they won't trigger the siren). Then 5s after you close the door(s) or trunk, they can then trigger the siren if later opened. You will only hear Error Chirps on cars that allow Lock/Unlock while the doors and/or trunk are open.

# GWA (Ground When Armed)



The 540H feeds a (-) Ground output while the system is Armed. Optional devices can be activated by this control line, such as LED scanners. When the system is Disarmed, GWA is switched OFF and all attached devices turn off. See the Installation Guide for electrical specifications.

# SBS (Sector Bypass System)



A "sector" is the Ignition, the Hood, any Door, and attached Sensors. When a sector triggers the siren a certain number of times (see below), that sector is bypassed (disabled) until you Disarm and Arm again. This limits noise pollution caused by multiple siren triggers in a short period of time (such as when you park near construction sites or if animals jump on the vehicle repeatedly).

**DOOR** — If a Door is left OPEN, the siren blasts up to 5 times (30s each time), then the Doors are bypassed until closed. (The **HOOD**, via the GRAY input wire, and the **TRUNK** are bypassed after triggering the siren <u>10 times</u>).

**IGNITION** — If the Ignition is left ON, the siren blasts up to **10 times** (30s each time) and then the Ignition is bypassed until you Disarm & Arm again.

SENSOR — Warning triggers (5 chirps) and Full Triggers (30s siren) are independently bypassed after 10 times. You must Disarm and then Arm again to re-activate.

# MAIN FEATURES





The Status LED flashes slowly about once per second while the system is Armed, acting as a visual theft deterrent. The LED turns off when the system is Disarmed, unless there was a siren trigger.

#### TRIGGER MEMORY



The LED flashes *rapidly* while the full siren blast is going off and keeps flashing rapidly even after the siren stops. When you Disarm, the Status LED will change its flashing pattern according to **Table-1** below, showing you what triggered the siren.

If the siren triggered more than once, the LED will show you what caused the last 3 triggers. Trigger Memory will displayed repeatedly on the LED until the Ignition is switched ON or until you Arm again.

TABLE-1	Status LED Trigger Memory		
	LED Flashes	What Triggered the Siren	
	2	Door	
	3	Trunk (or back hatch)	
	4	Hood (see Note below)	
	6	Ignition	
	7	Sensor (Full Trigger only)	
There are no LED Flashes if the power is cut and then restored.			



#### ·/!\ NOTE

On most cars, Hood triggers detected by CAN-BUS actually report as Door triggers. If you want Hood triggers to always report as Hood triggers on the Status LED, you will need to purchase an optional Hood Pin Switch and have it installed in the engine compartment (see the Install Guide for more info). Also see the entry on page 16 for more details about Hood trigger reporting.

# HAZARD FLASH

On cars that support it by CAN-BUS, vehicle Hazard lights will flash for the 30s duration of full siren triggers, and will flash 2-5 times (depending on the car) when shock sensor Warning Chirps are triggered.

# RESUME

RESUME is State Memory. It remembers if it was Armed or Disarmed when the main power is cut. When power is restored, the 540H will power-up Disarmed if it was disarmed when the power was cut. If originally Armed, it will power-up Armed with the siren blaring. And if in Valet Mode, it will remain in Valet Mode on power-up.

# Valet Mode



# PROGRAMMABLE ....



Valet mode disables all security functions, ensuring the siren won't trigger. This is useful when you must hand over your car keys to a valet or car maintenance technician — there's no worry they will trigger the siren by accident.

Activation: With the Ignition switched OFF and the 540H Disarmed, press and hold the Program Switch for more than 5s. (When you first press the switch, the LED will immediately light. But the LED will turn OFF after about 5s.) When the LED turns OFF, release the Program Switch.



**Deactivation:** Press and hold the Program Switch again for 5s, until the LED turns OFF. Security features are now restored. (You may also hear 2 quick chirps the first time you Arm, to inform you that you have just exited Valet Mode.)

# - ∕!\ CAUTION! -

When you activate Valet Mode, the Status LED will not blink and you will not receive any indication of being in Valet Mode. The security system will be completely turned off. This also means that someone could break into your car. Our company accepts no liability whatsoever if your car is stolen or vandalized or its contents stolen due to your having entered Valet Mode. You use this feature at your own security risk.



This procedure lets you to change features in Table-2 below.

- 1. Start the engine and then Stop the engine.
- 2. With the Ignition OFF, <u>Arm</u> the 540H and immediately <u>Disarm</u>, then do Steps 3, 4 & 5 below within 20 seconds.
- **3.** Turn ON the Ignition. (LED will flash if a door is open.)
- 4. <u>Press the Program Switch</u> the same number of times as the feature you want to program refer to the "No." column in **Table-2** below. (For example, to toggle "Ignition Trigger," push the Program Switch 3 times.)
- 5. Turn OFF the Ignition. (The LED will flash the same number of times as the feature you just toggled. There is no "Toggle Setting indication," so test to confirm what you programmed.)



# NOTES -

- 1) To program another feature, repeat the 5 steps above.
- 2) To RESET everything to factory defaults, perform the CAN Signal Learning procedure on page 13 of the Installation Guide. But be sure to read the "NOTE" there first.

# IMPORTANT!

Factory Default Settings DO NOT PREVENT Relay Attacks, Code Grabbers, CAN Invader & Game Boy attacks! Read Feature No.2 & No.6 descriptions on pp.12-13 to decide which to turn ON.

TABL	FEATURE SELECTION MENU				
No.	Feature Description	Toggle Settings			
2	Relay Attack Mitigation (Toyota & Lexus only)	OFF	ON		
3	Ignition Trigger	IG Protect	RSCM		
4	Hazard Flash During Remote Start	OFF	ON		
5	Error Chirp	ON	OFF		
6	CAN Injection, etc. Mitigation (Ignores Unlock)	OFF	ON		
7	Door Ajar Hazard Flash	OFF	ON		
8	Auto Arm	OFF	ON		
9	Siren/Horn Output	Continuous	Pulsed		
10	Auto Rearm	OFF	ON		
11	Presses required to enable Manual Disarming	2	3		
17	Car Finder Hazard Flash	OFF	ON		
FACTORY DEFAULT SETTINGS SHOWN IN BOLD TEXT ABOVE					

# **Relay Attack Mitigation**



#### **PATENTED**

OFF by default. Set to ON to stop Keyless Relay Attacks\*. When ON, pressing Unlock only 1 time will NOT Disarm. To Disarm you must press Unlock 2 times on your factory remote within 3 seconds. Prevents Relay Attacks only (not CAN Injection, Code Grabber or Game Boy attacks).

When set to **ON**, even if a Relay Attack thief touches the outside door handle many times, only one Unlock signal is sent. Unlike the door handle, your factory remote sends a signal each time you press Unlock on the remote. So pressing 2 times on your outside door handle to Unlock will NOT Disarm the 540H — you must press Unlock twice on your factory remote.

When set to **ON**, you then cannot program Feature No.6 to be ON. Conversely, if you have Feature No.6 programmed to be ON, you cannot program Feature No.2 to be ON until you turn OFF Feature No.6. You can use Feature No.6 instead to mitigate all known attacks including: Relay Attacks, CAN Injection, "Game Boy" and Code Grabber attacks.

\*Keyless Relay Attack Info: http://bit.ly/21TugCF

#### Ignition Trigger 3



#### You cannot Arm if IG is ON in IG Protect Mode

When set to IG Protect Mode (default), the system will trigger the siren when the Ignition (IG) turns ON while Armed, as described on page 7.

When set to RSCM (Remote Start Compatibility Mode), the system will bypass Shock Sensor & IG triggers when IG turns ON while Armed, as described on pg. 7. (See Install Guide pg.18, "3rd Party Engine Starter Triggers Siren.")

#### Hazard Flash During Remote Start 4



When set to ON, hazard lights will flash for safety while the Ignition is turned on by a remote start system while Armed. (This feature only works if program the Ignition Trigger to RSCM. Not compatible on some cars.)

#### Error Chirp A 5

Some cars let you Lock with a door or trunk open so when you Lock, you will hear 1 chirp followed by 2 chirps (see page 8). Sliding doors on some cars close so slowly Error Chirps may result. To ensure the chirps are not a nuisance, simply toggle Error Chirp OFF.

# 6 CAN Injection, etc. Mitigation (Ignore Unlock)



This feature offers more comprehensive protection than Feature No.6 but has some usage caveats, described below.

Set to ON to <u>prevent</u> CAN Injection, Code Grabber, "Game Boy" & Keyless Relay Attacks. When ON, the 540H will NOT Disarm when you press Unlock. After you Unlock and open a door, <u>you will have 20s to Disarm</u> either Manually (pg.5) or by a optional Remote, otherwise the siren will blast.

<u>NOTE</u>: We strongly recommend purchase of a **TR365-series RF remote** *kit*, otherwise Feature No.2 (pg.12) is more convenient *if* you don't care about CAN Injection Mitigation. Also note that Features 2 & 6 can't both be turned ON. Turn ON only one.

# 7 Door Ajar Hazard Flash



When set to **ON**, vehicle hazard lights will flash for safety (only on compatible cars) when a door is opened or left open while the Ignition is ON. Flashing will stop when the door is closed or Ignition is switched OFF. **NOTE**: The <u>Status LED</u> will always flash when the Ignition is ON and a door open, in order to notify the driver. This LED flashing cannot be disabled.

# 8 Auto Arm

This feature automatically Arms the system when you do this: (1) turn Ignition ON & OFF, then (2) Open & Close any Door. The system will Arm 20s after the last door is closed. **Doors will NOT be locked** so you won't be locked out if you leave your keys in the car, but the system will be Armed and will trigger if a door is opened.

# 9 Siren/Horn Output

When set to **Continuous** (default), the system will feed a continuous (+)12v output to sound a Siren for 30s (Full Trigger). When set to **Pulsed**, the system will feed a pulsed (+)12v (3A max.) output. While this can be used to create a unique sound if you cut the Blue loop wire on the siren, the Pulsed setting is primarily used when connecting to the vehicle's horn by relay. The 540H(R0) & 540H(R4) include one 896H-1CR relay.

# Auto Rearm

This feature automatically Rearms the system 60s after it is Disarmed, unless a Door or the Trunk is opened or the Ignition goes ON during the 60s. **Doors** will be locked when the system Rearms.

# ∕!\ NOTE

Many cars have a relock feature — if you Unlock with your factory remote, the car will automatically relock the doors after some time has elapsed, if no door has been opened. If your car has auto relock and if the 540H Arms on relock, you don't need to enable Auto Rearm.

#### Presses required to enable Manual Disarming 11

You are required to press the Brake Pedal (or any +12v switch you connect to the 540H's RED/WHT wire) 2 or 3 times in order to enable the Program Switch to accept your Manual Disarm Code. The factory default number of presses is set to 2. This enhances the security of Manual Disarming. See page 5 for details.

# Car Finder Hazard Flash



If set to ON, after you Disarm, the vehicle Hazard lights will flash (on compatible cars) for 30s, or until a Door or Trunk is opened or until IG is switched ON. This feature can help you identify your vehicle more quickly in a large and crowded parking lot.

# ANTI-THEFT LOCKDOWN FEATURES =

We added four advanced features in Fall 2025 that go far beyond what factory immobilizers can do, ensuring your car won't be driven away by a thief. Not all vehicles are compatible with all functions below, but feature overlap ensures your car will be protected.

#### PUSH START BLOCK

When Armed, the 540H can prevent the PUSH START button from engaging the engine, keeping the vehicle from being driven.

# **ENGINE CONTROL**

If PUSH START BLOCK is either incompatible with your car or not working, Engine Control will ensure that the engine cannot be used while the 540H is Armed.

#### SHIFTER POSITION CONTROL

Even if the engine is somehow engaged, the 540H monitors the Shifter's position while Armed, and if moved out of the P-position, the 540H can electronically disengage the engine.

# SHIFTER LOCK

If the 540H has been triggered by any Door or the Ignition switch, it can digitally lock the shifter so the thief cannot change gears.



# .∕!\ WARNING! -

You must enable Programmable Feature **No.2** <u>or</u> **No.6** (pp.11~13) to block the threats below and ensure the 540H is not Disarmed by a thief.

**Relay Attacks**: Two or more thieves redirect SmartKey signals to unlock doors or even start the engine.

**CAN Injection**: A thief accesses the car's CAN network, often through headlights, to unlock the doors or start the engine.

**Code Grabbers**: Thief gets near a SmartKey in use, stealing the code. The thief can unlock doors, but they can't start the engine.

**GameBoy**: By moving the door handle, etc. the thief can read signals and make a duplicate SmartKey to unlock doors and start the engine.

# TROUBLESHOOTING =

#### WANT TO DISARM BUT FACTORY KEYLESS REMOTE WAS LOST

You may not be able to Disarm if you have a car that requires the factory remote to turn on the Ignition. Contact your car dealer for a replacement factory remote.

#### SOMETIMES CAN'T ARM/DISARM WITH THE FACTORY REMOTE

- After Auto Arm, Auto Rearm and/or after Disabling Valet mode, you may need to press Lock-Unlock-Lock in order to Arm.
- Rapid pressing of Lock&Unlock can cause it. Wait longer between presses.
- With Confirmation Chirps (pg.3) *enabled*, do you hear 1 siren chip when trying to Arm? If not, the Ignition may be ON. You cannot Arm while the Ignition is ON while IG Protect Mode is enabled (see p.12)
- Pressing Unlock won't Disarm if Feature No.2 or No.6 is ON. (pp.11-13)

#### EASY DISARMING WITH "CAN INECTION" PROTECTION

Feature No.6 (pg.13) mitigates Relay Attacks, Can Injection attacks, etc., but because Manual Disarming (pg.5) is troublesome, we recommend the optional TR365D or TR365S 1-way remote kit for convenience.

#### THE SYSTEM IS DEFINITELY ARMED, BUT IT WON'T TRIGGER THE SIREN!

- It may be in Valet Mode. See page 10.
- It may be in Sensor Bypass Mode. See page 3.

#### CANNOT DISARM WHILE THE SIREN IS SOUNDING

- Wait a few seconds after the initial siren blast, then try to Disarm.
- Ensure all doors & trunk are closed, then try to Unlock to Disarm.
- Try Lock then Unlock. Also consider Features No.2 & No.6 on pp.11-13.

# SHOCK SENSOR 1st STAGE "WARNING" TRIGGER DOESN'T WORK

Examine the shock sensor and look closely at the two LEDs. When you lightly tap on the sensor, do you ever see a Green LED light?

- If you never see Green light, adjust the sensitivity knob on the sensor.
- If after increasing sensitivity you still don't see the Green LED, it could be that the suspended element inside the sensor body was shifted out of place. See **Install Guide pg.16** on how to resolve this.
- If you do see a Green light, the sensor is functioning properly. That means there is like a wiring problem. Check that the sensor wire harness is properly connected at both ends.

#### FULL SIREN BLASTS WITH ONLY LIGHT IMPACT TO THE VEHICLE

- You mounted the shock sensor to metal. Remount on a plastic part.
- · Turn down the shock sensor sensitivity.





**NEW for 2025** 

# DIGI∞LINK PREMIUM SERIES

# 540H

KEYLESS-CONTROLLED SECURITY

# Installation Guide

ANTI-THEFT LOCKDOWN TECHNOLOGY



# **Models Covered in this Manual**

• 540H(R0): Horn Relay (no Siren), no Shock Sensor

• 540H(R4): Horn Relay (no Siren), 318-054 Shock Sensor

• 540H(S0): KR22-1 Siren, no Shock Sensor

• 540H(S4): KR22-1 Siren, 318-054 Shock Sensor

# Æ

#### INSTALLERS, READ THIS MANUAL THOROUGHLY!

The 540H must be connected by an experienced SCIBORG installer. All product warranties immediately become void if the 540H is not installed by an authorized dealer.

If you acquired this product *without* professional installation, DO NOT install it yourself to save a little money at the risk of damaging your vehicle or causing physical injury.

⚠ NOTE: Consult Owner's Guide page 11 for Feature Programming.

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**NOTICE!** Although reasonable efforts have been taken to ensure accuracy in this Install Guide, KIRAMEK Inc. shall not be held liable for any errors, omissions, property damage, or injury resulting from the use of this information.

All product specifications and features are subject to change without notice.

# PRECAUTIONS & SAFETY

⚠ **OPERATION.** Use of the 540H outside its intended purpose, as described in this Install Guide and the 540H Owner's Guide, could result in damage to the vehicle or surrounding property, or cause serious injury or even death. As the installer of this security system, it is your responsibility to ensure that the vehicle owner is properly informed of all the details of your installation which are pertinent to safety.

#### **↑ SAFETY POINTS TO ABIDE BY:**

- Never start the vehicle's engine in enclosed spaces that lack adequate ventilation. Extended exposure to carbon monoxide exhaust fumes can result in death!
- 2. Do not disconnect the vehicle's battery, as it could cause serious problems with airbag systems, anti-theft radios or vehicle diagnostics. If you absolutely must disconnect the vehicle's battery, <u>first disconnect the main power wiring harness of the 540H</u> and then disconnect the vehicle's battery.
- 3. Do not proceed with installing this system in vehicles that do not have a 12-volt electrical system. This system will not function in 24-volt trucks, and any damage resulting from such installation shall be the sole responsibility of the installer.
- 4. Do not install the 540H control module or associated sensors in or near water, or in a location where water could gather. The 540H is not waterproof and an electrical short could occur if water gets inside. Only the siren can safely be installed in the engine compartment.
- 5. Do not install the 540H control module in an environment of intense condensing humidity or steam, in an area with an unusually large number of airborne particles, or any place where oil could build up inside the control module case. All of these extreme environments could lead to an electrical short and possible cause a fire.
- **6.** Avoid installing the 540H and its associated sensors near sources of intense RF transmissions which could possibly interfere with the operation of the system. If you find the system is randomly working and not working, consider relocating any attached sensors.

# **INSTALLATION TIPS**

#### Steps Toward a Professional Installation:

- Ensure all electrical contacts cannot easily break by tugging on the
  wires. Use the included 4 PosiTap connectors (RED) to directly connect
  to vehicle's CAN & Power wires. Use the included PosiLock connector (DARK RED) when connecting to the Siren. For all other connections, use solder if required and securely cover with electrical tape, heat
  shrink tubing and/or corrugated tubing.
- Use only a DMM (digital multi-meter) to test leads or take voltage readings. Do not use "test lights" or "logic probes" ("computer-safe test lights" included) because they draw a large amount of electrical current that could overload and destroy sensitive circuitry in the vehicle.
- Manually turn off all lights (such as the dome light) that illuminate
  when a hatch is opened so you will not run down the battery. If you cannot manually turn off all the lights, then remove the appropriate fuses
  and don't forget to replace the fuses after your installation is complete.
- Roll down a window to avoid locking the keys in the car.
- If unsure, consult the vehicle owner about where the LED Program Switch, Control Module, Siren, and Shock Sensor should be mounted.
- If you need a constant +12 volt power source under the dash, splice off the wire leading to pin-16 (POWER) at back of the vehicle's OBD plug. OBD pin-16 supplies a constant +12V at up to 7A.
- When running extension wires, always use a wire gauge that is as big or bigger than the wire you are extending.

#### **Useful Installation Items:**

- DMM (digital multi-meter)
- Battery-powered drill & driver
- Electrical Tape or Heat Shrink Tubing
- Brake Cleaner or Alcohol degreaser
- Soldering Iron & Solder
- Corrugate Tubing
- Wire Stripper/Crimper
- Wire ties



# TECHNICAL SPECIFICATIONS

# **Control Module**

**Operating Voltage:** Nominal 12Vdc (14.4v when engine running)

(Cold-crank voltage must be 2.9v or higher.)

**Current Consumption:** 3.3mA @12Vdc (Armed\* w/ LED flashing)

1.5mA (Disarmed or Armed\* in Sensor Bypass Mode)

(Does not include Shock Sensor consumption)

Operating Temp.:  $-40^{\circ}\text{C} \text{ to } +85^{\circ}\text{C}$ 

Certification: IP40

\* While vehicle CAN sleeping

# Shock Sensor 540H(R4) or 540H(S4) ONLY

**Operating Voltage:** 12Vdc (fed from Control Module)

**Current Consumption:** 4.8mA (avg.) when Armed, 0mA when Disarmed and

when in Sensor Bypass Mode

Operating Temp.:  $-40^{\circ}\text{C} \text{ to } +85^{\circ}\text{C}$ 

Sensor Technology:Infra-red Beam DeflectionCertification:IP40 (also passed IP50 tests)

Replacement P/N: 318-054

# Siren 540H(\$0) or 540H(\$4) ONLY

Operating Voltage: Nominal 12Vdc (14.4v when engine running)
Current Consumption: 0mA when quiet, 1A max. during full siren blast

Operating Temp.:  $-40^{\circ}\text{C to } + 125^{\circ}\text{C}$ 

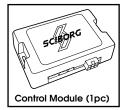
**Loudness:** 125dB (measured 30cm/1ft from speaker)

**Audio Generator:** 1-tone (6-tone selectable by cutting loop on siren)

**Housing:** Water-resistant (cannot be submerged)

Certification: IP54
Replacement P/N: KR22-1

# INCLUDED ITEMS

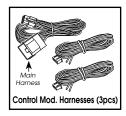


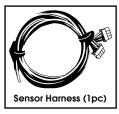


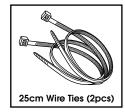




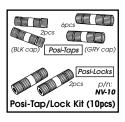
















# READ THIS FIRST

# ALARM FIRMWARE, OBD INFO & ONE-TIME LEARNING

#### FIRMWARE

The 540H only works on select Toyota & Lexus cars that have a compatible CAN-BUS communication system. If your car is not on our Compatibility Charts, the 540H won't work! We don't accept product returns due to CAN-BUS data mismatching, so make absolutely sure prior to purchase that your vehicle is compatible and that firmware matched to your vehicle's CAN has been programmed into the 540H product by your authorized SCIBORG dealer or by our company, KIRAMEK, Inc. Visit our 540H product page for the latest Compatibility List (which may be in Japanese only): https://kiramek.com/en/540.html

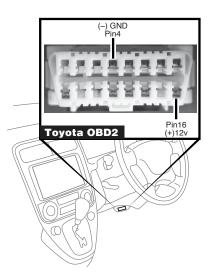


#### **OBD CONNECTOR INFO**

Modern cars, including Toyota, no longer let you to access CAN-H & CAN-L using the vehicle's OBD plug.

Request our <u>CAN Wiring Guide</u> for your car to know where to connect to CAN-H & CAN-L wires.

The only useful wires at back of your car's OBD plug are +12V & Ground. Diagram at right shows them in the Toyota OBD connector. (See page 7 for info about OBD +12v sleep issues.)

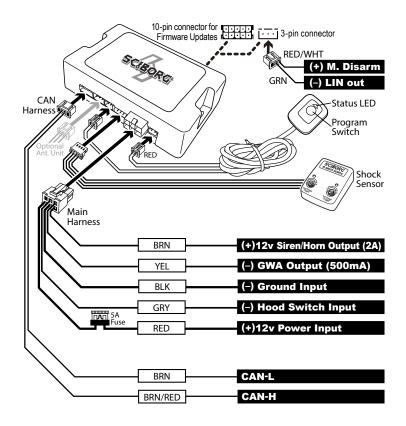


#### ONE-TIME LEARNING

After you have connected the CAN & Power wires and the Siren wire (pages 6-9), you will need to perform the CAN Signal Learning steps on page 13. You must perform the CAN Learning steps even though the 540H has been programmed with firmware matched to your car.



# SYSTEM WIRING DIAGRAM



# -∕!\ NOTES

- 1) There are two BROWN wires shown above. Don't confuse them!
- 2) "Optional Ant. Unit" is for the RF Antenna included in our optiona TR365 wireless remote kits.
- 3) Our NV-10 Posi-Tap and Posi-Lock connector kit is included with the 540H. Never use electrotaps! Always use Posi connectors to make your connections, especially the CAN and LIN wires.

# POWER & CAN CONNECTIONS

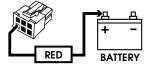


#### /I\ NOTE

OBD on modern cars can't be used anymore for CAN wiring, so pages 7-8 describe how to individually connect Power & CAN. CAN wire colors and location vary by car, so be sure to request our CAN Wiring Guide for your car to know where to access CAN-H & CAN-L.

# RED (+)12v Power Input

#### MAIN HARNESS

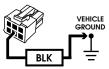


The RED wire is the (+)12v power input to the 540H. Use an included Posi-Tap (gray cap) to connect this wire securely to a *constant* 12v source, such as the factory wire attached to Pin-16 of the car's OBD2 connector (photo on page 5).

Thankfully, Toyota and Lexus cars <u>do not</u> sleep the factory OBD connector to save power like some European cars do, so you shouldn't have a problem taking +12v from Pin-16 of the factory OBD. Even so, Toyota could change their body computer at any time. If you find the 540H shutting down when it should not, always troubleshoot your Power and/or Ground connections! If you have doubts about whether the OBD is being put to Sleep, run an extension wire through the firewall and attach the 540H's RED wire directly to the positive +12v battery terminal.

# BLK (-) Ground Input

#### MAIN HARNESS



The BLACK wire is the (-) Ground input to the 540H. Be sure to connect this wire securely to a good ground source. Most security system installation problems result from a bad ground connection! The easiest connection is to the factory wire behind Pin-4 of the car's OBD connector (as shown in the photo on page 5.)

And unlike Pin-16 (+12v) of the car's OBD, Pin-4 (Ground) is normally not put to Sleep by some body computers. If you have doubts though, you can connect to body metal or an existing bolt (brush with steel wool first), or you can run a wire directly to the car's Negative battery terminal.

# POWER & CAN CONNECTIONS

# BRN CAN-L

#### **CAN HARNESS**

CAN-L The location of CAN wires varies by car, but most modern Toyota & Lexus cars require you to access CAN wires behind the glove compartment on the passenger side. Details can be found in our separate CAN Wiring Guide for your specific car model, so be sure to request it when purchasing the 540H.

DON'T CONFUSE CAN-L WITH THE BROWN SIREN OUTPUT!

# BRN/RED CAN-H

#### CAN HARNESS

**BRN/RED** 

As mentioned above, most modern Toyota & Lexus CAN-H cars require you to access CAN wires behind the glove compartment on the passenger side. Details can be found in our separate CAN Wiring Guide for your specific car model, so be sure to request it when purchasing the 540H.



↑ Use included BLK-cap Posi-Tap connectors for CAN connections!

#### (-) LIN Output GRN

# 2-WIRE HARNESS W/BLK CONNECTOR



Vehicle Diesel engine Toyota cars like HiAce require the GRN wire to connect to vehicle LIN. Not required for Hybrids without electronic "joystick" gear shifters, but Hybrids like Prius with electronic shifters require the LIN connection.

**NOTE!** Remote Starters that use a vehicle key in a box are incompatible!

# RED/WHT (+) M. Disarm

# 2-WIRE HARNESS W/BLK CONNECTOR



Required to use Manual Disarming. Connect either to the Brake Pedal (recommended) or to a push-button switch that can supply (+)12v. See Owner's Guide pg.5. Tell the car owner if you connected to the Brake or a switch.

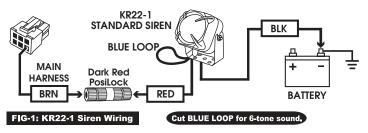
# SIREN/HORN CONNECTIONS =

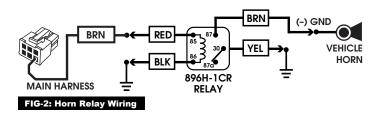
# BRN (+)12v Siren/Horn Output

#### WARNING!

DO NOT confuse this wire with the Brown wire of the CAN harness!

This wire outputs (+)12v (1A typical) during a security breach to operate the Siren (FIG-1 below) included with security models 540H(S0) or 540H(S4), or to operate the Relay (FIG-2 below) included with models 540H(R0) or 540H(R4).





# **⚠** NOTE

Two PosiLock connectors are included for making BRN output wire connections.

When mounting a Siren, it's tempting to connect (-) Ground to a bolt in the siren's metal mount since the car body is Ground, but rust rust could eventually cause a faulty Ground.



# SIREN/HORN SETUP =

# USING THE HORN

By default, the 540H sends a Continous (+)12V on the Brown Siren/Horn output wire. That's fine for the Siren, but not when connecting to the vehicle's Horn. A continuous signal sent to the horn is no different than pressing down on the horn button inside the car and keeping your hand on it for a full 30 seconds! The Horn is made to be used intermittently, so to ensure a long life for the car's horn, please consult Owner's Guide pages 11 &13 in order to change Feature No. 9 to "Pulsed." You can also use the "Pulsed" setting with the Siren too, if you like, but it's primarily used when connecting to the Horn.

#### SIREN MOUNTING LOCATION

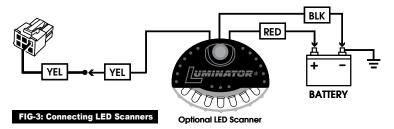
Unlike the 540H control module and sensors, the Siren is to be mounted within the engine compartment. That means you must run a wire through a rubber grommet in the firewall to connect the 540H control module's Brown Siren Output wire to the Siren. Avoid mounting the siren in places where water can pool or constantly fall on it.

# MORE OPTIONAL CONNECTIONS $\equiv$

# YEL (-) GWA Output

#### OPTIONAL PARTS REQUIRED

GWA stands for Ground-When-Armed. This wire supplies (–) Ground (500mA max.) while the 540H is Armed. One common use is for visual theft deterrents like scanning LEDs shown in Fig-3 below. LEDs activate while the 540H is Armed.



# MORE OPTIONAL CONNECTIONS

# GRY (-) Hood Input

In cases where Hood opening cannot be detected by CAN-BUS, you can install an optional Hood Switch like our S-114R or S-111. Connection is shown in **Fig-4** at right.

Even when your Hood can be digitally detected by CAN-BUS, it will report as a **Door-**

#### **OPTIONAL PARTS POSSIBLY REQUIRED**

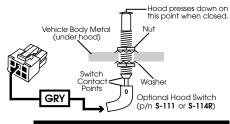


FIG-4: Optional Hood Pin Switch Installation

open trigger rather than a Hood-open trigger.

If that bothers you, you can use a Hood switch. Connecting to a mechanical switch will force the 540H to report all Hood triggers properly. (See "Trigger Memory" on Owner's Guide page 9.)

If your car already has a factory pin switch for the Hood, you can use that instead of buying an optional Hood Switch.

#### CAN SIGNAL LEARNING =

This required procedure verifies the firmware in your 540H is perfectly matched to your car. The 540H will not function until you complete the steps below. You only need to do it once.

# CAUTION: Factory Reset –

The procedure below also RESETS the 540H to its factory state. All Programmable Features (Owner's Guide pg.11) and any custom Manual Disarm Code (Owner's Guide pg.5) will be reset. Learned remotes (TR365S, TR365D) will be erased from memory and you will have to relearn them. Any previously learned CAN signals will be overwritten.

- 1) Disconnect the white 6-cavity connector of the Main Harness OR remove the Fuse on the Red +12v power line. (The objective is to kill power to the 540H control module.) Wait about 10 seconds.
- 2) Switch ON the Ignition\*.
- 3) Press-and-hold the Program Switch, and at the same time reconnect the Main Harness or reinsert the Fuse. You should now hear the siren blast. and you will notice the LED is lit. (The 540H is now Factory Reset.)
- 4) Release the Program Switch. The siren will shut off and the LED will turn off. (And the siren may or may not chirp 3 times.)
- 5) Switch OFF the Ignition. (The LED may or may not stay lit and/or flash a few seconds.)
- 6) Lock and Unlock. Vehicle CAN signals are now learned. Wait 20 seconds before you Lock again, otherwise you may enter Sensor Bypass Mode (see page 3 in the Owner's Guide for details).
- \*NOTE: If the above steps do not work (i.e., the 540H won't function), you may need to start the engine in Step (2), rather than just switch the Ignition ON. If that doesn't work, see page 17.

# MOUNTING SYSTEM COMPONENTS

## **Control Module**



The Control Module is "the brain" of the system and therefore must be installed in a secure location under the dash. NEVER install the Control Module in the engine compartment or near any source of heat or moisture! NEVER place the Control Module near moving parts or in a location where it can vibrate or move around excessively.



#### /!\ NOTE ·

When considering an appropriate mounting location, keep in mind that most thieves hot-wire vehicles by removing the plastic panel just under the steering column.

Locations above or behind the glove box, behind the radio or high up under the dash are all good mounting places. However, you may need to extend wires if your chosen location is too far from the steering column. If you extend wires, always use the same or larger gauge wire! Solder all large gauge wire connections and cover with electrical tape or heat shrink tubing and/or corrugate tube. Mount the control module to a secure, flat surface or use wire ties to affix to a factory wire harness.

# **LED Program Switch**



The Status LED is used as a visual theft deterrent when the system is Armed and to alert the user if the siren triggered in their absence. And both the LED and the Program Switch are used for feature programming.

This unit is the size of a factory switch cover, so you can easily mount it with the included 2-sided tape somewhere near the steering wheel. Mount it so the LED can be seen from outside the driver's side window. Such will warn would-be thieves and conveniently show you the Trigger Memory.

# Siren



Find a location in the engine compartment (such as the firewall) that is far from heat sources or moving parts such as belts or the radiator fan. Locate a factory bolt or bolt hole for securing the siren mount; otherwise, you will need to drill holes and use self-tapping screws. Mount in a place that will not be splashed excessively with water or immersed in water.

# MOUNTING SYSTEM COMPONENTS

#### **Shock Sensor**

The included 318-054 shock sensor is not waterproof so only mount it *inside the car*. Only use *the included* 2-sided tape, and mount the sensor to the outside of a plastic surface such as the car's center console. We recommend you mount it in open view (rather than hide it) in order to make sensitivity adjustments easier.

When chosing a mounting location on the driver's side (typically on the lower side of the center console plastics), try to mount the sensor in a place where it cannot be accidentally kicked by the driver. And before you mount the sensor with the included tape, use your fingers to press against the place where you want to mount it,



to see if the plastics move a lot when you press on them. Plastics that are "looser" will result in lower shock sensitivity. Mounting on a more firm section of the car's plastic will result in much better sensitivity. Since you only have one piece of included tape, try to determine the best mounting location before you affix it.

**NEVER** use screws or wire ties to mount the sensor! Always mount to plastic, using the included tape! Mounting to metal can increase sensitivity so high it will cause false triggering.

We strongly recommend you first clean the mounting surface in the car with brake cleaner (or similar oil solvent, degreaser) to make the sensor's 2-sided tape stick more permanently. Even when affixing the sensor to very rough textured car plastics, the use of brake cleaner on the plastic surface will allow the sensor tape to stick permanently. Failure to clean the surface may result in the tape peeling off over time, which would cause the sensor to fall off and possible false trigger the siren.



#### /!\ NOTE

Always mount the shock sensor and sensor wires more than 30cm (1ft.) away from any RF transciever that emits radio waves, and 30cm away from any Ultrasonic Sensor controller. Failure to do so may cause the shock sensor to randomly false trigger the siren.

# ADJUSTING THE SHOCK SENSOR

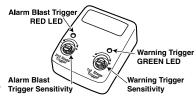
# Sensitivity

Factory settings work reasonably well:

- Left Knob = 20% (9 o'clock)
- Right Knob = 40% (11 o'clock)

Turn each knob clockwise to *increase* Trigger Sensitivity sensitivity and counter-clockwise to

decrease. Can't find good settings? Move the sensor in a different location.



#### KNOB SENSITIVITY EXPLAINED

The Right knob (1st Stage) limits the maximum sensitivity range of the Left knob (2nd Stage). Setting the Right knob to 50%, for example, limits the Left knob's sensitivity to only 40% of what's possible. Increase Warning Trigger sensitivity to allow greater increases in Alarm Trigger sensitivity.

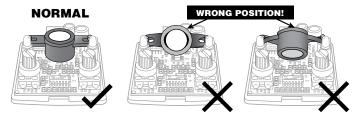


# **False Alarms**

The sensor is designed to avoid false triggers, but it can trigger the siren during a strong earthquake, jackhammer operation near the vehicle, hurricane/typhoon, large explosions/fireworks, large animals ramming against the vehicle, etc. Avoid false triggers in those situations with Sensor Bypass Arming, which ignores the shock sensor (page 3 of the Owner's Guide).

# **Suspended Reflector Malfunction**

If the shock sensor is not working well or at all, it may be that the suspended element inside the case was jolted out of position. Disconnect the wire harness, snap open the shock sensor case, and adjust as shown below.



# TROUBLESHOOTING =

#### CAN LEARNING NOT SUCCESSFUL.

- When Learning fails, the Status LED informs you like this:
  - 1) Lit Solid (no flashing): Vehicle firmware data was never programmed at all, or is incorrect; or CAN wires are connected wrong.
  - 2) Blinks Twice: CAN wires or the harness connector are disconnected.
  - 3) Endless Blinking: 540H firmware doesn't match vehicle.
  - 4) Erratic Blinking: power to 540H is unstable or battery voltage low.
- Reconfirm your Power and CAN connections. If CAN-H and CAN-L are
  reversed, you cannot learn the vehicle's CAN signals. Also note that
  the vehicle's CAN wires are normally a "twisted" pair. If you connect to
  wires that aren't twisted, you probably chose the wrong wires.
- ALWAYS Check our 540H Compatibility Charts prior to purchase! The make, model and year is very important. Toyota & Lexus only!
- Verify with KIRAMEK what firmware is programmed to your 540H control module. If the firmware isn't perfectly matched to your vehicle, it doesn't matter if your wiring is perfect, the alarm will not function until the correct firmware is flashed to the 540H.
- Try these ALTERNATE CAN LEARNING STEPS:
  - 1) <u>Disconnect</u> the white 6-cavity connector of the Main Harness <u>OR</u> remove the Fuse on the Red +12v power line. (The objective is to kill power to the 540H control module.) Wait about 10 seconds.
  - 2) <u>Press-and-hold</u> the Program Switch, and at the same time reconnect the Main Harness or reinsert the Fuse. You should now hear the siren blast, and you will notice the LED is lit. (The 540H is now Factory Reset.)
  - 3) Release the Program Switch. The siren will shut off but the LED will remain lit.
  - 4) Switch ON the Ignition. The LED will turn OFF. (And the siren may or may not chirp 3 times.)
  - 5) Switch OFF the Ignition. The LED will light for 5 seconds, turn off for 2 seconds, and then it will flash 6 times. (The 6 LED flashes show the Manual Disarm code has been reset to 6, the factory default.) Vehicle CAN signals are now learned. Wait 10 seconds before you begin testing.



#### CAN LEARNING SUCCESSFUL, BUT ALARM OPERATION IS ERRATIC.

- Intermittent PWR / GND connections or low car battery voltage (should be 12.5v or more) are the main reasons for unexplained alarm behavior.
- If your power source and connections are perfect, the only other reason for erratic behavior is *incorrect 540H vehicle firmware*. The only fix for this is to have the correct firmware programmed by KIRAMEK.

#### SHOCK SENSOR ONLY "FULL TRIGGERS." THERE'S NO WARNING TRIGGER.

- View the sensor's LEDs when you hit the car's body. If the Green LED doesn't light, slightly increase the sensitivity of the shock sensor.
- If the Green LED lights, perhaps you're testing too quickly. After Locking/Arming, you must wait 10s before you can test the shock sensor.

#### SHOCK SENSOR GIVES REPEATED WARNING TRIGGERS.

• If the sensitivity of the sensor is too high and/or if the mounting location is incorrect, the sensor may be triggering on the otherwise undetectable sounds of the hazard light relay switching, or even the siren vibration. Reduce sensitivity and/or change the mounting location of the sensor.

#### 3rd PARTY ENGINE STARTER TRIGGERS SIREN.

In 2014, many remote start systems began using a "Door is Open" output wire to trick the car into thinking a door has been opened after the remote starter shuts off. They use that wire to turn OFF the Headlights on cars where the Headlight Switch is set to AUTO.

540H firmware prevents siren triggering caused by a door-open signal when you enable RSCM (see "Ignition Trigger" on pg.12 of Owner's Guide). If you still experience door-open siren triggering while RSCM is ON: (1) Do not use the AUTO setting on your Headlight switch, and (2) Cut or Disconnect the remote start system's "Door Open" Wire. If that doesn't work, you must Disarm the 540H before the remote starter shuts off the engine. (Another less desirable solution is to completely remove the remote starter.)

# OPTIONS =

The 540H can be installed in your car without need for any add-ons, but there are several available to enhance security and convenience:

TR365S: 1-way, 3-btn RF Remote & Antenna Kit (20~100m range)

or TR365D: Same as TR365S but includes 2 remotes instead of 1.

NOTE: We strongly suggest you purchase a TR365 remote and antenna kit if you enable Feature No.6 for CAN Injection protection. See Owner's Guide pages 11 & 13.

S-114R or S-111: Pin switch to detect Hood opening. (You don't need either of these switches if Hood opening can be detected by CAN and you don't mind Hood triggers showing as Door triggers. You also don't need these switches if our wiring data for your car shows a vehicle Hood pin switch you can connect to instead.)

## Optional Sensors & Splitter Box:

- MMF-2: 2-stage Radar Sensor
- KST-24: 2-stage Digital Tilt Sensor
- SB-03: Sensor Splitter to easily connect up to 3 sensors at once

Luminator® LED Scanners - visual theft deterrents

# **NOTES**



SCIBORG products are engineered in Japan and manufactured in strict accordance with Japanese QC standards at an ISO9000/QS9000 certified factory.

https://kiramek.com