

3RP / 5RP 4-BUTTON SERIES VEHICLE SECURITY SYSTEMS

INSTALLATION MANUAL

Before you begin the installation

- Read the INSTRUCTIONS!
- Always use a multi-meter when verifying vehicle wiring.
- Before mounting the product, verify with the customer the desired location for the program switch and LED.
- Protect the vehicle by using fender covers.
- Always look before drilling. Make sure you will not cause damage to vehicle hoses, electrical looms or physical damage to vehicle.
- Program the dip switches on the module first (see dip switch information).

Installation Instructions

Mounting System Module

Mount the system module under the dash where it will be difficult for a potential thief to locate the module, and away from moving parts such as brake pedals, etc.

Route the antenna wire away from wire looms, computer modules and metallic objects for better range.

Mounting Siren

Mount the siren in a suitable place under the hood, away from hot and moving engine parts such as manifolds, fan belts, etc. Make sure the siren cannot be accessed from underneath the vehicle or through the grill. Face the siren down so that water cannot accumulate inside the siren bell. Protect wires running through the firewall using either tape or split loom tubing. If a new hole is needed, protect the wire from chaffing by installing a proper size grommet.

Mounting Shock Sensor

Secure the shock sensor to the steering column, thick wire harness or a dash brace, using a wire tie. Make sure that the adjustment screw is accessible for later testing and adjustment.

Dip Switch Settings

Make sure to set all dip switches in proper position prior to mounting the module.

Switch #1= Lock/Unlock Pulse Time:

- On = .75 Seconds
- Off = 3 Seconds

Switch #2: Door Unlock Pulse

- On = Ignition Lock
- Off = No Ignition Lock

Switch #3: Passive Door Locks

- On = Passive Door Locking
- Off = No Passive Door Locking

Switch #4: Passive Arming

- On = Passive Arming
- Off = Active Arming Only

Programmable Features

The following features are programmed with the use of the remote transmitter:

Program #1: Parking Light Operation

- On = Car finder feature
- Off = Normal

Program #2: Door Unlock Pulse

- On = Single
- Off = Double

Program #3: Auxiliary 2 Output

- On = Auxiliary 2 Output
- Off = Horn Honk Output

Program #4: Trunk Disarm Feature

- On = Disabled
- Off = Enabled

Program #5: Normal/Silent Arming

- On = Normal operation
- Off = Silent operation

Program #6: Auto Re-arm

- On = Auto Re-arm enabled
- Off = Auto Re-arm disabled

To enter program mode:

1. Turn ignition to the on position.
2. Wait 2 seconds.
3. Within 10 seconds press program switch 5 times.
4. The siren will give one long chirp indicating the system is now in program mode.

To change programmable features:

Press valet switch the number of times that equal to the feature to be changed. The siren will chirp each time the switch is pressed. (Example: to turn feature #3 off press the valet switch 3 times).

- Press button 1 on the remote to turn the feature on, the siren will chirp once.
- Press button 2 on the remote to turn feature off. Siren will chirp twice.

System will automatically exit program mode.

NOTE: You must re-enter program mode for each feature you wish to change.

Dip Switch Settings

Switch #1 = Lock/Unlock Pulse Time:	ON = .75 seconds	OFF = 3 seconds
Switch #2 = Ignition Triggered Door Locks:	ON = Ignition Lock	OFF = No Ignition Lock
Switch #3 = Passive Door Locks:	ON = Passive Lock	OFF = No Passive Lock
Switch #4 = Passive or Active Arming:	ON = Passive Arming	OFF = Active Arming

Default Reset

To reset all programmable features to their factory default settings:

1. Turn ignition to the on position.
2. Wait 2 seconds.
3. Within 10 seconds press valet switch 5 times. The siren will give one long chirp indicating the system is now in program mode.
4. Press transmitter button 3. The siren will chirp 3 times and all programmable features will be reset to the On position.

Main Harness

- **BLACK/WHITE WIRE** - Dome light relay polarity input (+/-). For negative polarity door trigger vehicles connect this wire to ground. For positive polarity door trigger vehicles, connect this wire to +12V.
- **BLACK/WHITE WIRE** - Dome Light Relay Output (+/-). Connect to the wire that activates the vehicle's dome light, usually the door pin switch wire. NOTE: The dome light output may usually be connected to the same wire used for the door trigger input (See GREEN and VIOLET door trigger wires).
- **ORANGE WIRE** - Armed Output (-) 500mA. Connect to a relay for optional circuit defeat

(See installation diagrams). The ORANGE wire provides a ground when the unit is armed to activate a fuel pump disable relay or other device (i.e. window control module, etc.).

- **GRAY WIRE** - Auxiliary 1 Output (-) 500mA. Connect to a relay for optional trunk release, etc. (See installation diagrams). The GRAY wire provides a ground output as long as the transmitter button is pressed.
- **GREEN WIRE** - Negative Door Trigger Input (-). Connect to the door switch circuit wire that shows ground when the door is open.
- **BLUE WIRE** - Trunk/Hood trigger (-). Connect the Blue wire to the trunk and/or optional hood pin switches. The switch must provide a ground output when switch is opened.
- **VIOLET WIRE** - Positive Door Trigger Input (+). Connect to the door switch circuit wire that shows +12V when the door is open. This type of door circuit is usually found on Ford vehicles.
- **BROWN WIRE** - Siren Output (+) 3A. Connect to the siren's red wire. Connect the siren's black wire to ground.
- **WHITE WIRE** - Parking Light Output (+) 15A Relay. Connect to the wire that switches to +12V when only the parking lights are turned

Programmable Features

Step	Function	Button 1 (On)	Button 2 (Off)
1.	Parking Light Operation	Car Locator Feature	Normal
2.	Door Unlock Pulse	Single	Double
3.	Auxiliary 2 Output	Auxiliary 2	Horn Honk
4.	Trunk Disarm Feature	Disable	Enable
5.	Normal/Silent Arming	Normal	Silent
6.	Auto Re-arm	On	Off

on. If the vehicle's parking light circuit exceeds 10 amps a relay is required. For vehicle's with independent left and right parking light circuits, the parking light wires must be connected using diodes to keep the circuits separate. NOTE: Do not connect the WHITE wire to the vehicle's headlight circuit.

- **RED WIRE** - +12V Battery Input. Connect the red fused wire on the main harness to a constant +12V source. This source wire should be at least 20 amp supply.
- **YELLOW WIRE** - +12V Ignition Input. Connect to a main ignition wire in the main ignition switch wire harness. This wire shows +12V when the ignition is on and while cranking. The voltage must not drop when the car is starting.
- **BLACK WIRE** - Ground Input (-). Connect to a solid chassis ground that is clean and free of paint or dirt.
- **WHITE/RED WIRE** - Auxiliary 2/Horn Honk Output (-) 500mA. Connect to an optional relay or accessory module. The WHITE/RED wire provides a ground output as long as the transmitter button is pressed. Ideal for window roll up or remote start. The WHITE/RED wire can also be used as an optional horn honk output instead of Auxiliary 2 (see Remote Programmable Features step 3).

Starter Defeat Connectors

Using a volt/ohm meter locate the starter wire (normally a heavier gauge wire) at the ignition switch. This wire will show +12V only during cranking. When this wire is cut the vehicle will be unable to start. Cut the

BROWN starter disable wire (with the two female connectors), and connect one side to the vehicle's starter wire coming from the key switch. Connect the other BROWN wire to the wire going to the starter. Plug the female connectors on the BROWN wires to the .250 male spade lugs on the module. With the BROWN wires connected to the module, the vehicle should be able to start.

Plug in Connectors

4-Pin White Connector: Plug-in connector port for dual stage shock sensor.

3-Pin Red Connector: Plug-in connector port for optional sensor.

2-Pin Red Connector: Plug-in connector port for LED. Mount LED in an area where it may be easily seen from either side of the vehicle.

2-Pin Blue Connector: Plug-in connector port for program/service switch. Mount valet switch in an area that is easily accessible from the driver's position.

Door Lock Connectors

3 Relay Systems (500mA Outputs)

5-Pin White Door Lock Connector: Plug-in connector port for door lock harness (see 3 relay door lock diagrams).

- **WHITE WIRE** - no connection.
- **GREEN WIRE** - no connection.
- **BLUE WIRE** - negative unlock output (-).
- **BROWN WIRE** - negative lock output (-).
- **VIOLET WIRE** - no connection.

5 Relay Systems (Built-in relays)

5-Pin White Door Lock Connector: Plug-in connector port for door lock harness (see 5 relay door lock diagrams).

- WHITE WIRE - lock switch (87a).
- GREEN WIRE - lock motor (30).
- BLUE WIRE - unlock motor (30).
- BROWN WIRE - unlock switch (87a).
- VIOLET WIRE - lock/unlock polarity (87).

Adding/Deleting Transmitters

To add a new transmitter to the system or delete a lost transmitter, have all desired transmitters ready and follow the Code Learning sequence.

To enter Code Learning Mode:

1. Turn ignition key on, off, on, off, and leave on within 5 seconds.
 - Siren will chirp once.
2. Press and hold valet switch for 2 seconds.
 - Siren will chirp three times.
3. Release the valet switch.
4. Program all desired transmitters by pressing button 1 on each one.
 - Siren will chirp after learning each transmitter.
5. Turn ignition key off.

The transmitters are now programmed to the system. Any transmitters not coded during this procedure will no longer operate the system. The system can learn up to 3 transmitters.

Test System and Adjust Shock Sensor

Arm and disarm system, checking that the siren chirps and parking lights are functioning normally. Make sure that the programmed features (via dip switch) are performing correctly, ie.: ignition locks, passive arming, passive locks, etc.

Test the doors and hood/trunk inputs (make sure all doors trigger the system, not just the drivers door). Use the Silent Test Mode (see page 12).

Adjust the shock sensor (clockwise for more sensitive, counter clockwise for less sensitive), making sure that it is not too sensitive.

Arm the system and try starting the vehicle, it should not start.

Arm the system and disarm it with the ignition and override switch.

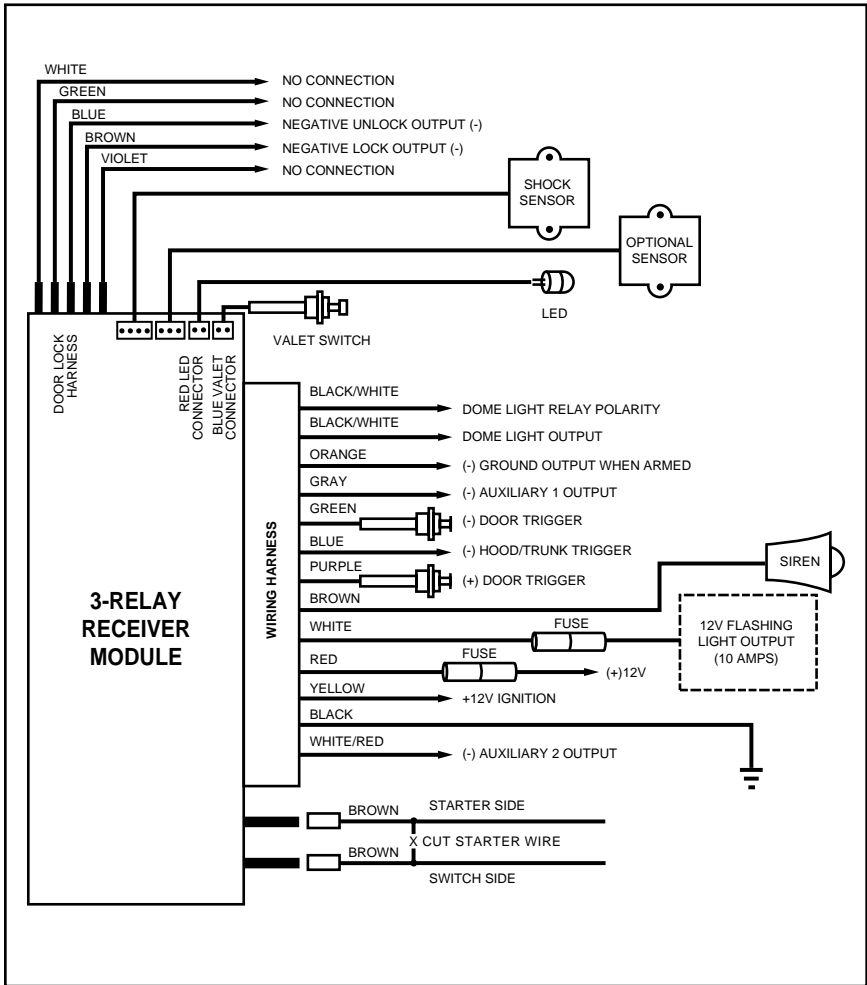
If programmed to passively arm make sure that the system arms properly.

Check the range of the remote transmitters.

Tie up wire harness, and replace any under dash panels.

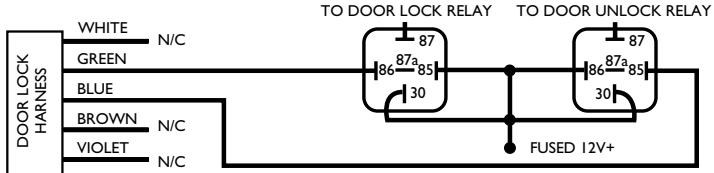
Make sure the customer has physical knowledge of the location of the valet/override switch.

3 RELAY SYSTEMS WIRING DIAGRAM (w/o on-board lock relays)

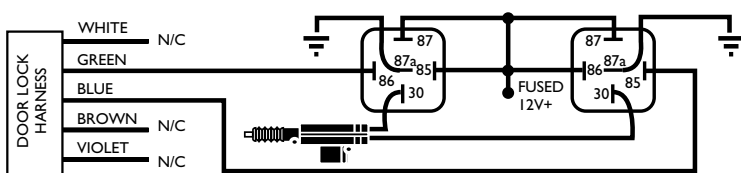


3 RELAY SYSTEMS DOOR LOCK DIAGRAMS (w/o on-board lock relays)

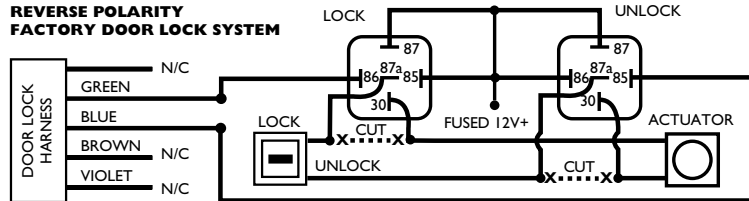
POSITIVE PULSE DOOR LOCK SYSTEM



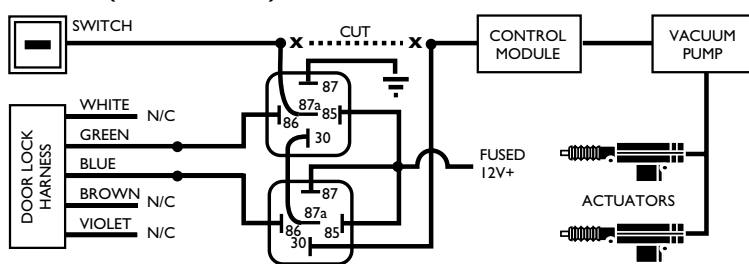
REVERSE POLARITY ADD-ON ACTUATOR



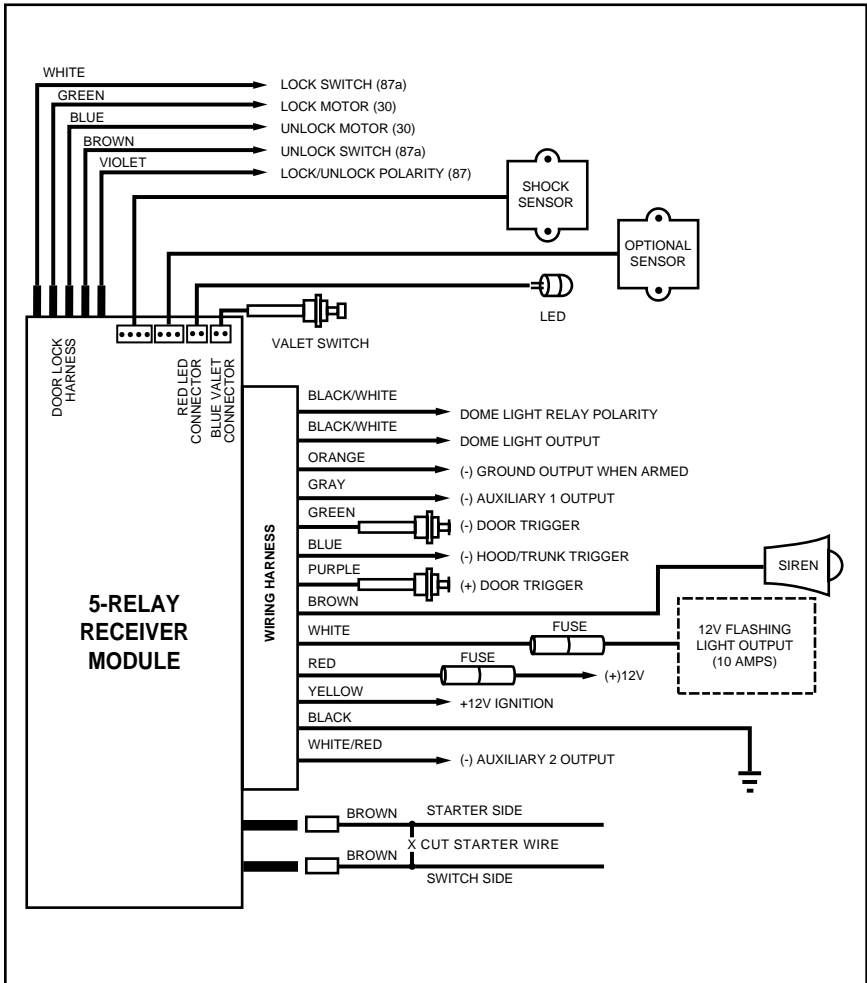
REVERSE POLARITY FACTORY DOOR LOCK SYSTEM



MERCEDES (VACUUM SYSTEM) FOR MODELS WITHOUT DOOR LOCK RELAYS

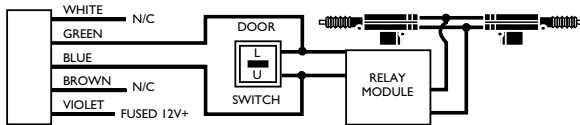


5 RELAY SYSTEMS WIRING DIAGRAMS (with on-board lock relays)

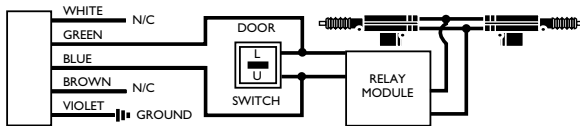


5 RELAY SYSTEMS DOOR LOCK DIAGRAMS (with on-board lock relays)

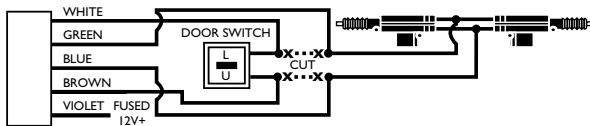
POSITIVE PULSE DOOR LOCK SYSTEM



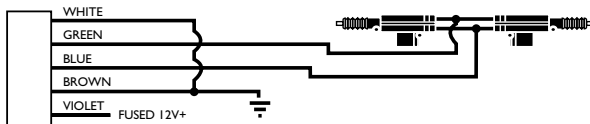
NEGATIVE PULSE DOOR LOCK SYSTEM



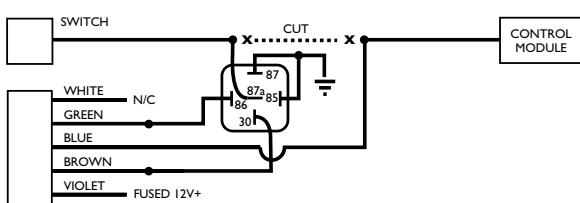
REVERSE POLARITY FACTORY DOOR LOCK SYSTEM



ADDING ACTUATORS



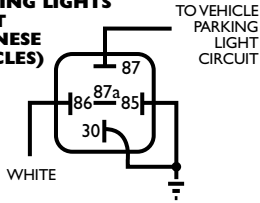
MERCEDES (VACUUM SYSTEM) DIP SWITCH TO #1 TO OFF



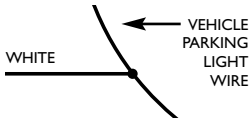
SYMPTOM	PROBABLE CAUSE	SUGGESTED CORRECTION
Alarm doesn't Arm/Disarm.	Alarm in Valet Mode; Ignition input has voltage on it; Missing +12V or ground.	Take alarm out of Valet mode; Turn key off and verify yellow wire is connected to correct ignition wire; Check +12V and ground connections.
Alarm will not Passively Arm.	Dip Switch #4 is OFF, wrong polarity door input wire, Yellow ignition input has 12V+ on it.	Change Dip Switch #4 to on position; Correct door switch polarity; Change ignition input wire; Make sure alarm is not in Valet.
Alarm will not enter Code Learning Mode.	Ignition was not left in the on position after turning it on & off three times; Sequence not performed rapidly enough (5 sec.); Valet/Override Switch is defective or not plugged in.	Leave ignition in on position; Repeat procedure quicker; Replace valet switch.
Alarm chirps 4 times 30 seconds after system is Armed.	Factory Dome light Delay is longer than 30 seconds; Door open or defective pin switch; Shock sensor is not properly adjusted or defective.	If dome light delay is longer than 30 seconds no correction necessary; Replace defective pin switch; Adjust or replace shock sensor.
Parking lights do not flash.	Wrong wire connected to the White wire, or requires a negative output.	Correct the wire connected to the White wire, Using a SPDT relay reverse polarity on white wire (see diagrams).
System Arms and Disarms but doesn't chirp siren	Chirp Delete mode is engaged.	Enter programming step 5 and press transmitter button 2.

SYMPTOM	PROBABLE CAUSE	SUGGESTED CORRECTION
Illuminated Entry does not activate on upon disarm.	Wrong polarity selected.	Change polarity of the Black/White wire.
Range is poor.	Antenna wire is grounded; Module is picking up interference from vehicle's electrical system.	Make sure antenna is not connected to ground; Relocate module or route antenna away from computer modules.
Vehicle starts when armed.	Wrong starter wire was cut.	Locate proper starter wire and reconnect.
Car will not start when system is disarmed.	Bad connection on brown starter wire harness; Defective starter defeat relay	Repair connection at starter wire; Replace module.
Keyless entry does not operate with remote.	Wrong door lock polarity; Wrong lock wires connected.	See door lock diagram; Verify vehicle lock/unlock wires.
Ignition triggered door lock feature does not operate.	Yellow wire shows +12V; Door is open; Door trigger input wrong polarity.	Connect yellow wire to the proper ignition wire; Close door; Change door trigger polarity.
Car horn honks when system disarmed and door is opened.	Vehicle factory security system needs to be disarmed.	Locate disarm wire (usually located in drivers kick panel) and use unlock pulse to disarm factory system.
Alarm system intermittently works.	Bad power and ground connections.	Replace and secure power and ground connections
Car will not start and alarm does not function properly.	Vehicle battery dead or drops below 7.5 volts when trying to start the vehicle.	Replace battery or charge.

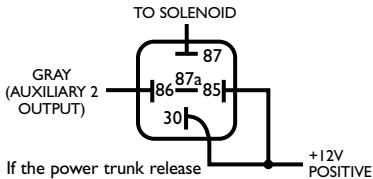
**FOR NEGATIVE
PARKING LIGHTS
(MOST
JAPANESE
VEHICLES)**



FOR POSITIVE PARKING LIGHTS

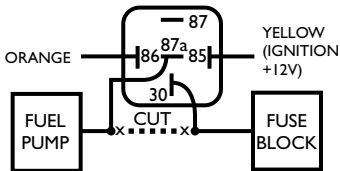


TRUNK RELEASE CIRCUIT DIAGRAM



If the power trunk release requires a positive pulse to operate, use this circuit.

OPTIONAL CIRCUIT DISABLE



STATUS INDICATOR (LED) FUNCTIONS

Off = System Disarmed

Slow Flash = System Armed

Rapid Flash = Passive Arming Indication

Rapid Flash (after disarm) = System was triggered

On Solid = Valet mode

On Solid (after arming) = Shock sensor inactive for 10 seconds while settling

On Solid (when disarmed, and not in Valet) = Door or hood/trunk is open. See Test Mode.

SILENT TEST MODE

When the system is disarmed the LED will turn on solid every time an input is triggered. This mode is used to verify proper operation of the shock sensor, doors, hood, trunk, and auxiliary sensor input.

SIREN CHIRP STATUS

1 Chirp = System Armed

2 Chirps = System Disarmed

3 Chirps = System Disarmed, but alarm was triggered while away

4 Chirps = 30 seconds after arming indicates defective sensor or trigger zone

5 Rapid Chirps = Warn away triggered