

# RF-425LCD

# PROFESSIONAL VEHICLE SECURITY SYSTEM

# **INSTALLATION MANUAL** (FOR AUTHORIZED DEALERS ONLY)

THIS PRODUCT IS DESIGNED FOR PROFESSIONAL INSTALLATION ONLY





## **10 PIN MINI CONNECTOR WIRE HARNESS:**



## 6 PIN DOOR LOCK WIRE HARNESS:



## WIRING

Keep wiring away from moving engine parts, exhaust pipes and high-tension cable. Tape wires that pass through holes on the firewall to prevent fraying. Be careful of sharp edges that may damage wires and causes short circuit.

**CAUTION:** Do not connect the wire harness to the control module until all wiring to vehicle is complete.

## MAIN 5 PIN WIRE HARNESS:

WHITE WIRE - PARKING LIGHT RELAY OUTPUT (+12 V 10A OUTPUT) --

Connect the WHITE wire to the parking light wire coming from the headlight switch. Do not connect the WHITE wire to the dashboard lighting dimmer switch. (Damage to the dimmer will result). The limitation of the WHITE wire is 10 AMP max. Do not exceed this limit or damage to the alarm and parking relay will result.

BLACK WIRE -- SYSTEM GROUND -

This is main ground connection of the alarm module. Make this connection to a solid section of the vehicle frame. Do not connect this wire to any existing ground wires supplied by the factory wire loom, make the connection to the vehicle's frame directly.

## BROWN WIRE -- (+) SIREN OUTPUT

This is the positive (+) output connection for the siren. Current capacity is 2 amps. Make connection to the (+) red wire from the siren. Make the (-) black wire coming from the siren to a good chassis ground.

## RED WIRE -- SYSTEM POWER (+12V CONSTANT) --

The RED wire supplies power to the system. Connect this wire to a constant +12 volt source.

## BLUE / BLACK WIRE -- (-) HORN OUTPUT --

This wire is provided to use the existing vehicle's horn as the alarm system's optional warning audible device. It's a transistorized low current output, and should only be connected to the low current positive (-) output from the vehicle's horn switch.

#### 4 PIN ORANGE CONNECTOR FOR 2 STAGE SHOCK SENSOR



1. Red Wire / +12Volts

Function: For both Orange Port 1 and White Port 2, Allows easy positive, negative, instant trigger, and warn-away trigger connection with quick disconnect ability for other detection devices.

#### **10-PIN MINI CONNECTOR WIRE HARNESS.**

- 1. BLUE WIRE -- GROUND INSTANT TRIGGER INPUT --
- This wire is the ground trigger input wire for hood/trunk pin switches.
- 2. Black / BLUE WIRE (-) 200mA Timer Control Channel 4 Output -
- This wire has a built-in user-programmable timer output that provides a ground through this wire. Press the transmitter  $\blacksquare$  and  $\textcircled$  button at the same time. You may program the built-in timer to send a ground signal for any time interval between 1 second and 2 minutes. For instance, this timer output may be used to turn on the headlight with the remote control. Also on certain BMW, Mercedes Benz, Jaguar and Volkswagen cars, you can use this unique timed output to allow remote closure of all power window and sunroof without the need for an external module! (See Feature C 4 Programming)
- 3. **VIOLET WIRE** -- POSITIVE DOOR SWITCH SENSING INPUT--This wire is the positive trigger input wire for positive door pin switch. This wire connection is for "positive" type factory door pins(typical FORD MOTOR). Locate the "common wire" for all door pin switches and make the connection of the Violet Wire.
- 4. YELLOW WIRE TO IGNITION SWITCHED +12V --

This wire is connected to a Ignition switched 12 volts source. This wire should receive "12 Volts" when the ignition key is in the "ON" and "START" position. When the ignition is turned "OFF", this wire should receive "0" voltage.

- 5. GREEN WIRE -- NEGATIVE DOOR SWITCH SENSING INPUT --
  - This wire is the ground trigger input wire for negative door pin switch. This wire connection is for "grounding" a factory-type door pin switch; locate the "common wire" for all door pin switches and make the connection of the Green Wire.
- 6. ORANGE WIRE -- (-) 500mA GROUNDED OUTPUT WHEN ARMED --

This wire will become grounded when the alarm is armed. The current capacity of this wire is 500mA. This output can control starter disable, when an intrusion is detected and the system is triggered. The alarm will prevent any unauthorized persons from starting the vehicle.

**NOTE:** If more than one electronic device will be connected to the H10/6 ORANGE Wire, it will be necessary to isolate the connection of each device control wires with a 1N4003 diode.



## 7. PINK WIRE -- 2 STEPS UNLOCK OUTPUT / FACTORY DISARM

(See Feature **C – 3** Programming)

The 2 steps unlock feature will work for the most fully electronic door lock circuit. The vehicle must have an electronic door lock switch, which locks and unlocks all of vehicle's doors. When wired for this feature, press the button one time, the alarm will disarm and unlock the driver's door only. If you press the r button two times within 3 seconds, the alarm will disarm and unlock all doors.

FACTORY SECURITY DISARM SIGNAL OUTPUT -

This wire is designed to disarm a factory installed security system. This wire sends a negative (-) 1 seconds pulse upon a remote door unlocking. This makes integration of this system into a vehicle with a factory alarm very simple.

## 8. WHITE/BLUE WIRE - PROGRAMMABLE OUTPUT -

CHANNEL 3 OUTPUT (Factory default setting)

This wire is built-in user-programmable timer output provides a ground through this wire. Press the **a** + **b** button on the transmitter. You may program the built-in timer to send a ground signal for any time interval between 1 second and 2 minutes. For instance, this timer output may be used to turn on the headlight with the remote control. Also on certain BMW, Mercedes Benz, Jaguar and Volkswagen cars, you can use this unique timed output to allow remote closure of all power window and sunroof without the need for an external module! (See Alarm Feature **C** – **2** Programming)

## PAGER OUTPUT (See Feature C – 2 Programming)

This wire provides a negative output, when the alarm triggered. The current capacity of this wire is 200mA. For optional electrical device in this system, please connected to an additional relay. (I.E. Pager interface....)

## 9. GRAY WIRE - (-) 200mA PROGRAMMABLE OUTPUT -

## CHANNEL 2 OUTPUT (Factory default setting)

This will become a 2 seconds pulse ground by activate channel 2 on transmitter for two seconds, the current capacity of this wire is 200 mA. This feature allows you to remote control trunk release or other electric device. This output can also be programmed to provide the following type of output: 2 sec. pulse, latched, timer control and pager. (See Alarm Feature **C - 1** Programming)

## PAGER OUTPUT (See Feature C – 1 Programming)

This wire provides a negative output, when the alarm triggered. The current capacity of this wire is 200mA. For optional electrical device in this system, please connected to an additional relay. (I.E. Pager interface....)

## 10. WHITE WIRE - (-) 200mA DOME LIGHT CONTROL OUTPUT -

This wire becomes grounded when the dome light controls circuit active. The current capacity of this wire is 200mA. This wire can control the operation of the interior lights. An optional 10 Amps relay can be used to this system for interior lights operation.

a). Upon disarming, the interior lights will remain on for 30 seconds.

b). If the vehicle is v iolated, the interior light will flash for the same duration as the siren.

## **RF ANTENNA - BLACK THIN WIRE**

The black thin wire on the control module is the receiver antenna wire. Antenna placement is very important! Ensure that it is unwrapped and stretched out with the last 6" straight and keep it away from large metal objects or chassis for best reception.

## 4-PIN BLACK CONNECTOR. - AM TRANSMITTING/ANTENNA MODULE

The transmitting/antenna mounting location should be the upper left or lower left corner of driver's windshield. For optimum range we suggest that the antenna be mounted as shown in picture to the

right. (Antenna tip facing up)

#### Warning!

Do not mount in such a manner that it obstructs the driver's view.

-Paging button used to page person in possession of the 2-Way transmitter.

- Remove the protective tape backing.
- Carefully align the two-way transceiver/antenna and apply to windshield.
- Route the black connector wire behind the trim and connect to the twoway
- transceiver/antenna.
- Connect the other end to the control module.

\*\*Special considerations must be made for windshield glass as some newer vehicles utilize a metal-shielded window glass that will inhibit or restrict RF reception. In these vehicles, route the two ways transceiver/antenna module away from metallic shielded window glass as far as possible.\*\*



## 6 PIN DOOR LOCK CONNECTOR:









5-WIRE REVERSE POLARITY



## PROGRAMMING

## A. TRANSMITTER PROGRAMMING

## Enter:

- 1. Turn the Ignition 'switch 'OFF/ON' 3 TIMES and stay in ON position. Within 15 seconds.
- Push the Valet switch 2 times and hold in on the 2<sup>nd</sup> push, when a long chirp is heard then release the valet switch. You are now in the Transmitter programming mode.
- Program:
- 1. Press any button on transmitter 1 until the siren responds with a confirming chirp; the first transmitter is now programmed.
- 2. Press any button on the second transmitter until the siren responds with a confirming chirp; the second transmitter is now programmed.
- 3. Apply the same procedure to program 3rd and 4th

**Exit:** Turn Ignition to 'OFF' position, or leave it for 15 seconds. 3 long chirps and 3 Parking Light will confirm exit.

Note: If more than 4 transmitters programmed, the system will only keep the last four.

## ALARM FEATURE "A" PRORAMMING:

- 1. Turn the Ignition 'switch 'ON/OFF' 3 TIMES and stay in OFF position.
- Push the Valet switch 3 times and hold in on the 3rd push, when a long chirp is heard then release the valet switch. You are now in the Alarm feature 'A' programming mode.
- 3. Press the transmitter button corresponding to the feature you want to program. a. The factory default settings is always [1] LED flash, [1] chirp.
- 4. Depress the transmitter button again to change the feature. Simply keep pressing the transmitter button again until the module advances to your desired setting.

Press Transmitter Button	One Chirp / LED one pulse Factory Default Setting	Two Chirps / LED two pulses	Three Chirps / LED three pulses	Four Chirps / LED four pulses
1 🖨	Siren Confirmation chirp on only	All Confirmation chirps On	Horn Confirmation chirp on only	All Confirmation chirps off
2	Automatic Rearm off	Automatic Rearm on		
3 庵	Instant Door Ajar error chirp	45 seconds delay Door Ajar error chirp.		

Exit: Turn Ignition to 'OFF' position, or leave it for 15 seconds. 3 long chirps and 3 Parking Light will confirm exit.

## ALARM FEATURE "B" PRORAMMING:

- Turn the Ignition 'switch 'ON/OFF' 3 TIMES and stay in OFF position.
  Push the Valet switch 5 times and hold in on the 5<sup>th</sup> push, when a long chirp is heard,
- then release the valet switch. You are now in the Alarm feature 'B' programming mode.

3 Press the transmitter button corresponding to the feature you want to program.

Press Transmitter Button	One Chirp / LED one pulse Factory Default Setting	Two Chirps / LED two pulses	Three Chirps / LED three pulses	Four Chirps / LED four pulses
1 🖬	0.8-second Door lock pulses.	3.5-second Door lock pulse.	Double pulse unlock	Door lock with "Comfort Feature"
2	Active arming	Passive arming without passive door locking	Passive arming with passive door locking.	
3 🚰	Ignition controlled door locks & unlocks	Ignition controlled door locks only	Ignition controlled door unlocks only	Without ignition controlled door locks & unlocks
4 *	Pathway illumination feature "off"	Parking light turns "on" for 30- second upon an unlock signal	Parking light turns "on" for 30- second upon an unlock signal & 10-second upon a lock signal.	

Exit: Turn Ignition to 'OFF' position, or leave it for 15 seconds. 3 long chirps and 3 Parking Light will confirm exit.

## ALARM FEATURE "C" PRORAMMING:

- Turn the Ignition 'switch 'ON/OFF' 3 TIMES and stay in OFF position.
  Push the Valet switch 7 times and hold in on the 7<sup>th</sup> push, when a long chirp is heard, then release the valet switch. You are now in the Alarm feature 'C' programming mode.
- 3 Press the transmitter button corresponding to the feature you want to program.

Press Transmitter Button	One Chirp / LED one pulse Factory Default Setting	Two Chirps / LED two pulses	Three Chirps / LED three pulses	Four Chirps / LED four pulses
1 🔒	Channel 2 Output = 2 sec. Pulse	Channel 2 Output = Latched	Channel 2 Output = Timer control	Pager Output
2	Channel 3 Output = Momentary	Channel 3 Output = Latched	Channel 3 Output = Timer control	Pager Output
3 庵	Pink Wire = 2 Step Unlock	Pink Wire = Factory Disarm		
4 🗱	Channel 4 Output = 2 sec. Pulse	Channel 4 Output = Momentary	Channel 4 Output = Latched	Channel 4 Output = Timer control

Exit: Turn Ignition to 'OFF' position, or leave it for 15 seconds. 3 long chirps and 3 Parking Light will confirm exit.

#### Channel 2/3/4 Timer Control Output Programming: Enter:

- 1.
- Turn the Ignition 'switch 'ON/OFF' 3 TIMES and stay in OFF position. Push the Valet switch **7** times and hold in on the 7<sup>th</sup> push, when a long chirp is heard, then release the valet switch. You are now in the Alarm feature **'C'** programming 2. mode.

## Timer Program Channel 2/3/4:

- 1-a. CH2 Press and release the transmitter button 3 times, [3] LED flash, [3] siren/horn chirp to indicate you are in features "Channel 2 Timer Programming mode".
- 1-b. CH3 Press and release the transmitter a button 3 times, [3] LED flash, [3] siren/horn chirp to indicate you are in features "Channel 3 Timer Programming mode".
- 1-c. CH4 Press and release the transmitter \* button 4 times, [4] LED flash, [4] siren/horn chirp to indicate you are in features "Channel 4 Timer Programming mode".
- Press and hold the valet switch, the timer will immediately start. 2.
- When the desired interval has passed, release the valet switch. 1 long chirp for 3. confirmation.

#### (Set to any interval between 1 second and 2 minutes)

## Note 1:

If your built-in timer controls window/sunroof closure in your car DO NOT change the timer setting! This requires installer-only programming. Changing the value will adversely effect operation and may cause damage.

#### Note 2:

**Momentary output** = The momentary output selection will output a negative signal from the Channel 3 or 4 output immediately when the channel 3 or 4 button is pressed and will continue until the button is release.

Latched output = The latched output selection will output a negative signal as soon as the Channel 2,3 & 4 button is pressed and will continue until the button is pressed again.



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