

FAI-330 and FAI-440

Intelligent Car Alarm System

Table of Content

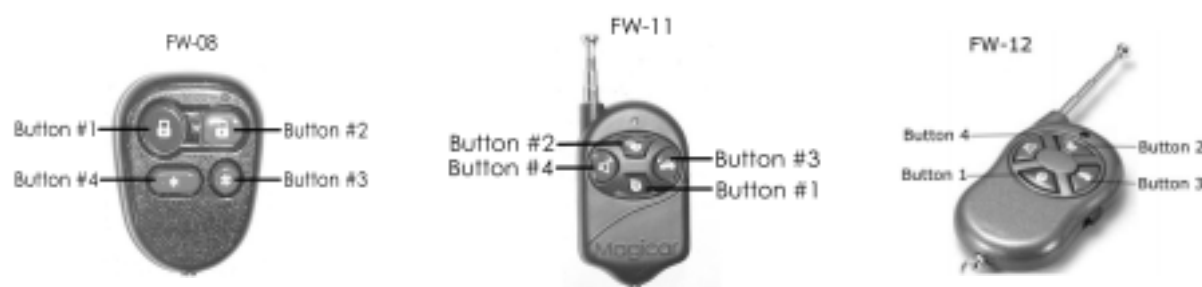
1 FEATURES & SPECIFICATIONS	2
2 TRANSMITTERS APPLIED FOR FAI-440 & FAI-330	2
3 FUNCTION	2
3.1 Programming Learning Code	2
A.CODE LEARNING:	2
KEY FUNCTION:	2
3.2 Program Feature Setup	3
Table of the Programming Features	3
3.3 ARM MODE:	3
3.4 Silent Arm/Disarm	3
3.5 Shock Sensor Bypass	3
3.6 DISARM MODE:	3
3.7 ALARM:	4
3.8 Trunk Release	4
3.9 Panic Mode	4
3.10 Channel 3 Output	5
3.11 Ignition Mode	5
3.11 Override Mode	5
3.12 Valet Mode	5
3.13 Active/Passive	5
3.14 Door Lock/Unlock Pulse	5
3.15 Dome Light Delay:	5
3.16 Auto Rearm	6
3.17 Anti-hijacking	6
FAI-440 WIRE DIAGRAM	7
FAI-330 WIRE DIAGRAM Wiring Note	8
Wiring Note	9

FAI-330 and FAI-440 Intelligent Car Alarm System

1 FEATURES & SPECIFICATIONS

- . Arm / Disarm
- . Dual stage shock sensing (control by software)
- . Panic mode / Anti hijacking
- . Valet mode
- . Auto re-arm
- . Ignition lock
- . Remote door lock / unlock
- . Remote trunk open (if installed)
- . Last door rearming
- . Passive lock
- . Dome light delay
- . Car finder
- . Override mode
- . Silent arm/disarm
- . Door lock/unlock pulse defaults
- . Keyless entry
- . Channel 3 output
- . Automatic and manual anti-hijacking

2 TRANSMITTERS APPLIED FOR FAI-440 & FAI-330 FW-08, FW11



3 FUNCTION

3.1 Programming Learning Code

A.CODE LEARNING:

Under the disarm mode, switch the ignition ON. With 10 seconds, press the valet switch 6 times, after 2 seconds, the siren will chirp for 2 seconds and then the system enters into the programming learning code. With another 10 seconds, press any button of first transmitter, the siren will chirp for 1 seconds and lights flash twice to confirm the code is learned into the first transmitter. Apply the same procedure within next 10 seconds for the second transmitter. When two transmitters have not finished learning code and, switch the ignition OFF or exceed the 10-second programming time, the system will quit the learning code procedure. The system will quit the learning code procedure after finishing the learning code for 2 transmitters.

KEY FUNCTION:

BUTTON	ARMED	DISARMED	IGNITION ON
PRESS BUTTON 1 ONCE	ARM	ARM	LOCK
PRESS BUTTON 2 ONCE	DISARM	DISARM	UNLOCK
PRESS BUTTON 1 OVER 3 sec.	PANIC	PANIC	
PRESS BUTTON 3 OVER 3 sec.	TRUNK RELEASE	TRUNK RELEASE	TRUNK RELEASE

PRESS BUTTON 4 ONCE	PANIC	PANIC	
PRESS BUTTON 1+2	SILENT DISARM	SILENT ARM	ANTI-HIJACKING
PRESS BUTTON 3 then 1	CHANNEL 3	CHANNEL 3	CHANNEL 3

3.2 Program Feature Setup

Under the disarm mode, switch the ignition on and off. Within 10 seconds, press the valet switch 3 times, 2 seconds later, the siren will chirp for 2 seconds and the system will enter into the program feature mode. Then within another 10 seconds, press the valet switch to select a defaulted item. After selecting the defaulted item, 2 seconds later, the siren will chirp one (default disable) or two (default enable) times to indicate the default is changed. For example, if need to change the default of No.3 Dome Light Delay as enable, after the system enters in the system enters in the program feature mode, within 10 seconds press the valet switch 3 times and the siren will chirp 3 times. 2 seconds later, the siren will chirp twice to indicate Dome Light Delay is defaulted as enable. Then if also need to change Default #6 Channel 3 output as enable, press the valet switch 6 times within another 10 seconds and the siren will chirp 6 times. 2 seconds later, the siren will chirp twice to indicate the Channel 3 output is defaulted as enable. The system will quit the program feature mode if the door is closed, switch the ignition on and exceed 10 seconds interval between each action. The siren will chirp 2 seconds to indicate that the system quits the program feature mode.

Table of the Programming Features

No.	CHIRP	FUNCTION	CHIRP ONCE FACTORY DEFAULT	CHIRP TWICE
1	1 CHIRP	IGNITION DOOR LOCK/UNLOCK	DISABLE	ENABLE
2	2 CHIRP	DOOR LOCK/UNLOCK TIME	1 SEC.	4 SEC.
3	3 CHIRP	DOMELIGHT DELAY	DISABLE	ENABLE
4	4 CHIRP	ACTIVE/PASSIVE	ACTIVE	PASSIVE
5	5 CHIRP	ALARM TIME	30 SEC.	60 SEC.
6	6 CHIRP	CHANNEL 3 OUTPUT	DISABLE	ENABLE
7	7 CHIRP	ANTI HIJACKING	DISABLE	ENABLE
8	8 CHIRP	ANTI HIJACKING MODE	MODE 1	MODE 2

3.3 ARM MODE:

Under the disarm mode, press button (1) when the ignition is off, the siren will chirp once, lights flash once and lock (depending on the default as 1 or 4 seconds), the LED flashes slowly, the start kill is on, and then the system enters into the arm mode.

3.4 Silent Arm/Disarm

- Press button (1) and (2) once simultaneously, the system will enter into the silent arm/disarm. The siren will not sound. If doors, hood or truck are not closed properly, lights will flash three times and LED will flash the memory to indicate that doors, hood or truck are not closed properly. The triggers of the above three sensors will be bypassed until they are closed properly.
- If triggered, when the system is silent disarmed, the start kill will be off, lights flash three times, the siren will chirp four times and the LED flashes trigger status. Then the system will enter into the auto rearm mode.

3.5 Shock Sensor Bypass

After pressing button (1) to arm, then press button (1) again within 3 seconds, the siren will chirp once and the shock sensor will be bypassed.

3.6 DISARM MODE:

A. DISARM CODE:

- Under the arm mode, press button (2) once, the siren will chirp twice, lights flash twice and unlock. The start kill is off and the LED flashes rapidly, then the system enters into the auto rearm mode.
- Under the arm mode, press button (2) once, the siren will chirp 4 times if there was a trigger before. Lights will flash three times and unlock, the start kill is off, LED flash trigger memories and then the system enter into the auto rearm mode.

B. Trigger Memory:

If the 2-stage shock sensor triggered ---- LED is in the cycle of flashing once and off.

If truck or hood triggered ----- LED is in the cycle of flashing twice and off.

If doors triggered ----- LED is in the cycle of flashing three times and off.

If ignition triggered ----- LED is in the cycle of flashing four times and off.

C. Clean trigger memories: Press button to disarm, and then switch the ignition on to clean trigger memories.

3.7 ALARM:

A. 1st-stage Shock Sensor Trigger:

Under the arm mode, the siren will chirp three times when triggered. If three constant triggers are the first-stage ones, then the first-stage shock sensor will be bypassed until the system is back

B. 2nd-stage Shock Sensor Trigger:

Under the arm mode, the siren will sound for 30 seconds when triggered. Lights will flash 30 seconds, LED is in the cycle of flashing once and off, the system will be back to the arm mode after 30 seconds. If three constant triggers are the second-stage ones, then the second-stage shock sensor will be bypassed until the system is back to the arm mode.

C. Truck or hood Trigger

- a. Under the arm mode, the siren will sound for 30 seconds if truck or hood is triggered. The siren will sound for 30 seconds, lights will flash 30 seconds, LED is in the cycle of flashing twice and off, the system will be back to the arm mode after 30 seconds.
- b. Under the arm mode, if truck or hood is triggered and then are still opened, the siren will alarm for three cycles and the between interval is 3 seconds. The system will be still in the arm mode then the sensors of truck or hood will be bypassed until they are closed properly

D. Door Trigger

- a. Under the arm mode, the system will alarm if doors are triggered. The siren will sound for 30 seconds, lights will flash 30 seconds, LED is in cycle of flashing three times and off, the system will still be under the arm mode.
- b. Under the arm mode, the system will alarm for 3 cycles if doors are triggered and still opened. The between interval is 3 seconds. After 3 alarm cycles, the system is still under the arm mode. The door sensors will be bypassed until doors are closed properly.

E. Ignition Trigger

- a. Under the arm mode, if the ignition is triggered, the siren will sound for 30 seconds, LED is in the cycle of flashing four times and off, the system will still be under the arm mode.
- b. Under the arm mode, if the ignition is triggered and is still on, the system will alarm for 3 cycles and the between interval is 3 seconds. After 3 alarm cycles, the system is still under the arm mode. The ignition sensor will be bypassed until the ignition is off.

F. Alarm Disable:

- a. The system will be still under the arm mode after the 30-second alarm time
- b. During the alarm, press button (2) once, the system will be under the disarm mode. The siren will chirp 4 times, the start-kill is on, lights flash three times, doors unlock and the LED will flash trigger memories.

3.8 Trunk Release

Under any situation, press button (3) over 2 seconds, the trunk will be released.

3.9 Panic Mode

- a. Under the arm or alarm mode, press button (1) over 3 seconds, the system will be armed. 3 seconds later, star-kill will be on and door lock. The siren will sound for 30 seconds, lights will flash for 30 seconds and LED flashes rapidly. The system will still be under the arm mode after 30 seconds.
- b. Under the disarm mode, press button (2) over 3 seconds, the system will be armed. 3 seconds later, the siren will sound for 30 seconds, lights flash 30 seconds. LED flashes rapidly. The system will still be under the arm mode after 30 seconds.
- c. Under the arm mode, press button (4) once, the siren will sound 30 seconds, lights will flash 30 seconds, LED flash rapidly. The system will still be under the arm mode after 30 seconds.
- d. Under the disarm mode, press button (4) once, the alarm will sound for 30 seconds, start-kill is on, door will be locked, lights flash 30 seconds and LED flashes rapidly. The system will still be under the arm mode after 30 seconds.

3.10 Channel 3 Output

- a. If channel 3 output is defaulted as enable: After the system is armed, the system will send 30-second signals of channel 3 output.
- b. If channel 3 output is defaulted as disable: After the system is armed, the system will not send any signals for channel 3 output. But pressing button can activate channel 3. Just press button (3) then hold button (1), then the system will send 30-seconds signals of channel 3 output.

3.11 Ignition Mode

- a. If the ignition door lock/unlock is defaulted as disable (Footbrake lock)
 - (1) When the system is disarmed and the ignition is on, if all doors are closed properly, the doors will be locked when depress footbrake pedal. Once all doors are locked, depressing footbrake pedal will not activate door locks.
 - (2) If any of all doors is not closed properly, depressing footbrake pedal will not activate door locks.
 - (3) When the system is disarmed and the ignition is on, footbrake lock will be activated once after open and close doors then depress footbrake pedal.
 - (4) When switch off the ignition, doors will be unlocked immediately.

Note: If users don't need this footbrake lock function, just don't connect the BLACK/RED wire from Connector C2-3.

- b. If the ignition door lock/unlock is defaulted as enable (Ignition door lock)
 - (1) When the system is disarmed, after switching the ignition on, doors will be locked after 3 seconds, if all doors are closed properly.
 - (2) When switch off the ignition, doors will be unlocked immediately.
- c. Under the ignition mode, pressing button (2) once can control door lock/unlock.

3.11 Override Mode

When the system is under the arm mode or the alarm is triggered, switch the ignition on, press the valet switch once, the system will be disarmed.

3.12 Valet Mode

- a. Under disarm mode, switch the ignition on, press the valet switch over 2 seconds within 10 seconds, the LED will be on, and then the system enters into to the valet mode.
- b. The anti-hijacking will not be activated when the system is under the valet mode.
- c. Under the valet mode, pressing buttons on transmitters can only control door lock/unlock.
- d. Under the valet mode, switch the ignition on, press the valet switch over 2 seconds within 10 seconds. The LED will be off and the siren chirps twice, then the system will quit the valet mode.

3.13 Active/Passive

- a. When default as active:

Under the disarm mode, after switch the ignition off, open and close doors, the system will not enter into the arm mode.
- b. When default as passive:

Under the disarm mode, after switch the ignition off, open and close doors, the LED will flash rapidly, the system will enter into the arm mode after 30 seconds. Within 30 seconds of LED rapid flashing, the 30-second clock will be re-counted if doors are opened and closed again.

3.14 Door Lock/Unlock Pulse

- a. When default the ignition door lock/unlock pulses as 1 second: door lock/unlock time is 1 second.
- b. When default the ignition door lock/unlock pulses as 4 seconds: door lock/unlock time is 4 second.

3.15 Dome Light Delay:

- a. When default the dome light delay as disable:

If doors, hood or truck are not closed properly and then the system enters into the arm mode, the siren will chirp three times, lights flashes three times and lock. The LED will flash the memory to indicate that doors, hood or truck are not closed properly, and then the system enters into the arm mode. The triggers of the above three sensors will be bypassed until they are closed

properly.

b. When default the dome light delay as enable:

If doors are not closed properly before arming the system, the siren will chirp once, lights flash once and lock, then the system enters into the arm mode. If doors are not closed after 20 seconds, the siren will chirp three times. The LED will flash the memory to indicate that doors are not closed properly. The triggers of door sensors will be bypassed until they are closed properly. If hood or truck is not closed properly before arming the system, please refer to B.

3.16 Auto Rearm

If triggered, after pressing button (2) to disarm, LED will flash trigger memories. Or LED will flash rapidly, the system will be in the auto rearm mode and enter into the arm mode in 30 seconds.

3.17 Anti-hijacking

a. When defaults the anti-hijacking as disable:

There is no anti-hijacking function.

b. When defaults the anti-hijacking as enable and as anti-hijacking mode 1:

(1) When the system is disarmed and the ignition is on, press button (1) and (2) simultaneously, lights will flash once and the system enters into the anti-hijacking. 60 seconds later, the siren will chirp 10 times and then the alarm starts sounding. The start kill is on and lights will start flashing. The siren will alarm for 30 seconds (or 60 seconds) for one cycle. The interval between cycles is 3 seconds. The alarm will not stop until the anti-hijacking is deactivated. When switch the ignition off during a circle, the alarm will sound until the alarming circle is off. And the system will remain under the anti-hijacking mode. If switch the ignition on again, the alarm will sound as described as above.

(2) Deactivating the anti-hijacking:

(2.1) After enter into the anti-hijacking mode, within 10-chirp or 60-second period, switch the ignition off and on, press the valet switch once, the anti-hijacking mode will be deactivated.

(2.2) After enter into the anti-hijacking mode and while the alarm is sounding, switch the ignition off and on, press the valet switch over 2 seconds, the anti-hijacking mode will be deactivated.

c. When defaults the anti-hijacking as enable and as anti-hijacking mode 2:

(1) When the system is disarmed and the Ignition is on, open and close doors, lights will flash once, the system will automatically enter into the anti-hijacking. 60 seconds later, the siren will chirp 10 times and then the alarm starts sounding. Doors will be locked, the start kill is on and lights will start flashing. The siren will alarm for 30 seconds (or 60 seconds) for one cycle. The interval between cycles is 3 seconds. The alarm will not stop until the anti-hijacking is deactivated. When switch the ignition off during a circle, the alarm will sound until the alarming circle is off. And the system will remain under the anti-hijacking mode. If switch the ignition on again, the alarm will sound as described as above.

(2) Deactivating the anti-hijacking:

(2.1) After enter into the anti-hijacking mode, within 10-chirp or 60-second period, switch the ignition off and on, press the valet switch once, the anti-hijacking mode will be deactivated.

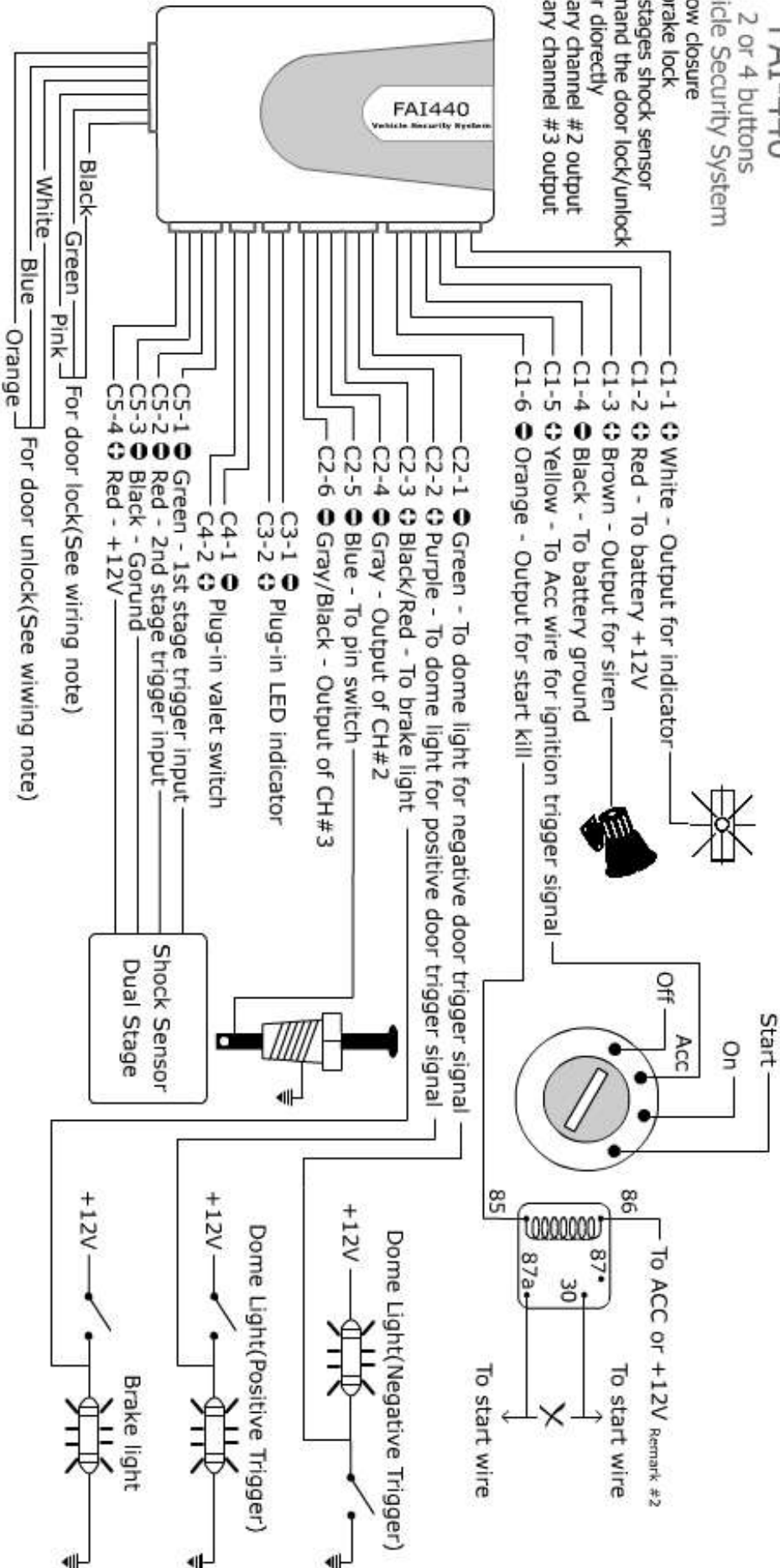
(2.2) After enter into the anti-hijacking mode and while the alarm is sounding, switch the ignition off and on, press the valet switch over 2 seconds, the anti-hijacking mode will be deactivated.

FAI-440 WIRE DIAGRAM

FAI-440

2 or 4 buttons
Vehicle Security System

- *Window closure
- *Footbrake lock
- *Dual stages shock sensor
- *Command the door lock/unlock motor directly
- *Auxiliary channel #2 output
- *Auxiliary channel #3 output



Remark:

1. Connects either C2-1 or C2-2 depends on the vehicle's dome light which is positive or negative trigger
2. Star kill relay:

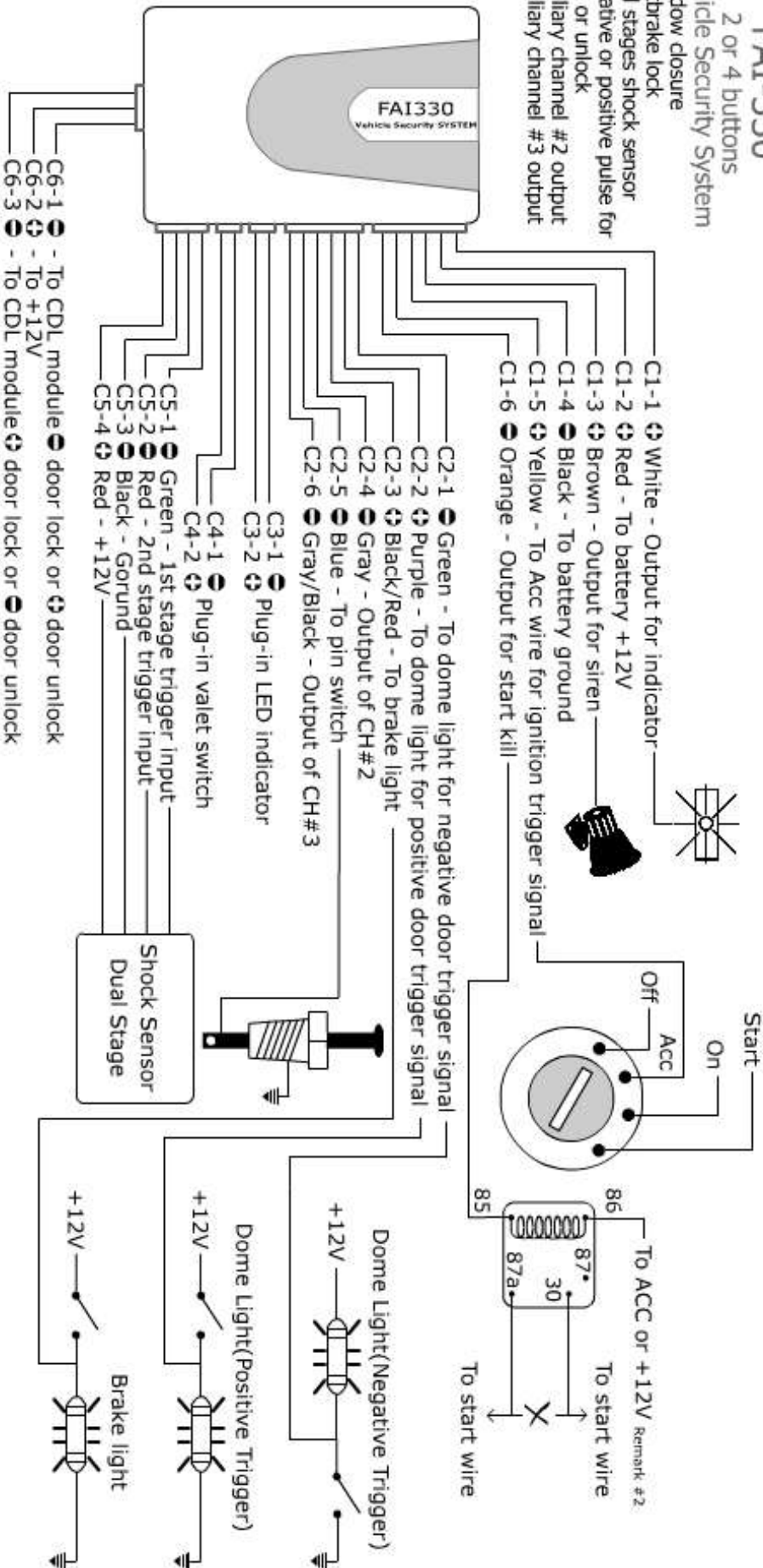
- *If connect #86 to Acc, under the armed mode, the start kill relay will be on only when the Acc is on (Economical mode)
- *If connect to +12V, the start kill relay will be on when the system is armed

FAI-330 WIRE DIAGRAM

FAI-330

2 or 4 buttons
Vehicle Security System

- *Window closure
- *Footbrake lock
- *Dual stages shock sensor
- *Negative or positive pulse for lock or unlock
- *Auxiliary channel #2 output
- *Auxiliary channel #3 output



Remark:

1. Connects either C2-1 or C2-2 depends on the vehicle's dome light which is positive or negative trigger
2. Star Kill relay:
 - *If connect #86 to Acc, under the armed mode, the start kill relay will be on only when the Acc is on (Economical mode)
 - *If connect to +12V, the start kill relay will be on when the system is armed

FAI-440 Wiring Note

Central door Lock Wiring Diagram

Diagram #A

Original built-in central power lock

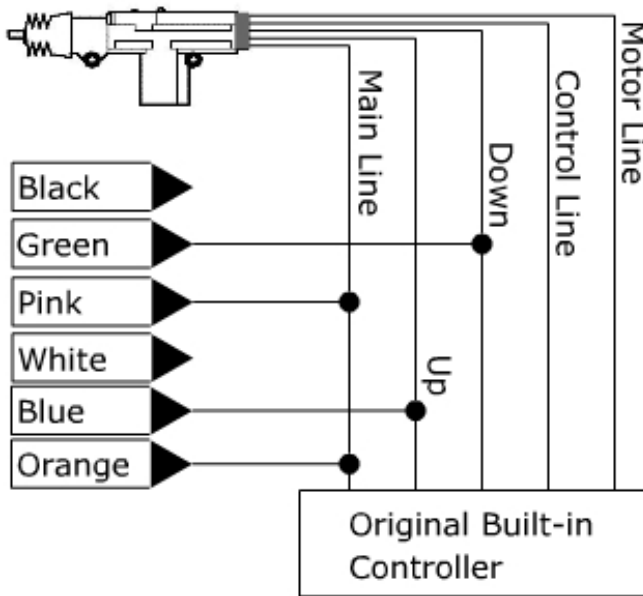


Diagram #B

Original built-in central power lock & electric power lock switch were installed
For example: CHRYSLER

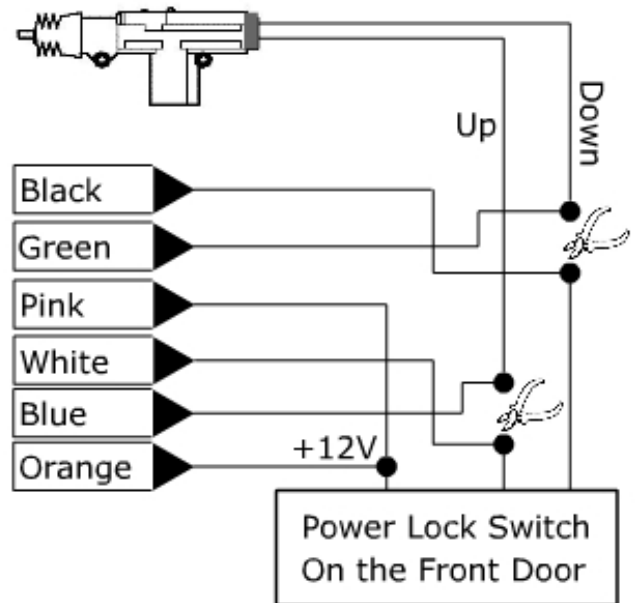


Diagram #C

Original built-in central power lock & only a switch existed inside of the front door.
A motor and the control level were required

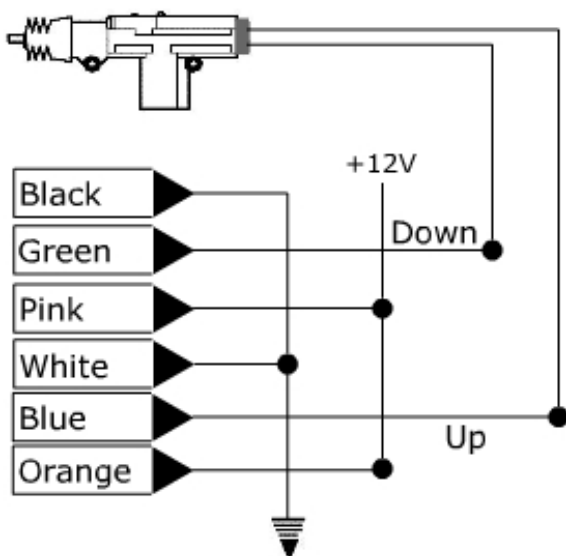


Diagram #D

Original built-in power lock & using compressor to control the switch.
For example: BENZ, AUDI
(Note: Active time 3.5 sec.)

