# MEGATRONIX – IM230 – IMMOBILIZER 1-WAY, 2-WAY, AND 3-WAY IMMOBILIZATION INSTALLATION AND OPERATION MANUAL

## INTRODUCTION

#### MOUNTING THE MAIN CONTROL MODULE:

The control module should be mounted in the storage box under the seat or in a hidden place not easily found by the thief. Use velcro tape or screws to fix main unit. Insure the unit is completely secure and will not rattle or come loose.

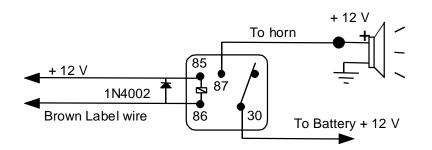
## MOUNTING THE LED & RECEPTACLE:

Mounting the LED & receptacle in s place of easy reach (for code key) and LED clearly see outside the window. Such as under dashboard.

#### WIRING

Note 1 : Each ends of the wire has it's own sticker on it, please see the sticker and wiring it to proper wire. Note 2 : You must at least connect the vehicle's starter wire to the system's starter wire.

- 1. RED LABEL WIRE -- CONSTANT +12V (SYSTEM POWER)--
- This wire supplies power to the system. Connect this wire to a constant +12 volt source from the fuse block.
- 2. BLACK LABEL WIRE -- SYSTEM GROUND --
- Connect this wire to a solid section of vehicle's ground and fasten it to ensure a good chassis connection.
- YELLOW WIRE -- IGNITION INPUT (IGNITION SWITCH POWER) --This wire is connected to a switched 12 volts source. It should receive 12 volts when ignition key is in 'on' and 'start' position. When ignition key turned 'off', it should receive 0 volts.
- 4. BROWN LABEL WIRE -- HORN OUTPUT (300 mA NEGATIVE OPTIONAL RELAY NEEDED)--This is the negative output connection of the vehicle existing horn. It's an optional audible warning device that uses the existing vehicle horn. When the system is triggered the horn will sound.



Note: 6054A equips two starter wires.

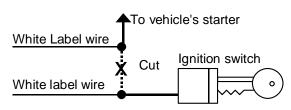
6055A equips two starter & two Ignition wires. 6056A equips two starter, two Ignition & two 30A wires.

## 5. WHITE LABEL WIRE - STARTER DISABLE --

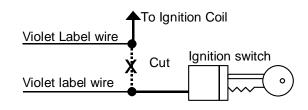
This output can control starter disable, when the system is armed, the vehicle is prevented from any unauthorized starting. Starter wires with 30 A relay built-in

- a). Find the wire from the starter solenoid, (usually located on the starter) and going to the ignition switch.
- b). When found, use voltmeter, connect one probe of the voltmeter to ground and connect the other end of the probe to the starter wire, it should receive "12 volts" only when the ignition key in the "start" position.
- c). After locating the correct wire, cut it in half, try to start the vehicle. The engine should not "crank over".
- d). When the extend wires are needed, they must be exactly same gauge as the cut wire. Connect the cut wire from the key switch to the white label wire, and connect the starter wire to the another white label wire.

## **STARTER DISABLE CIRCUIT:**



# **IGNITION DISABLE CIRCUIT:**



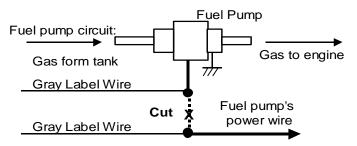
6. VIOLET LABEL WIRE - IGNITION DISABLE -

The two violet label wires carry out the electrical cut-out on the ignition system. Find the wire coming from the ignition key that supplies to ignition coils. Cut the wire in half and try to start the vehicle. If you have found the correct wire, the engine will crank over but not start. After you find the correct wire.

- 1) Connect one yellow wire to the cut half of ignition wire.
- 2) Connect the other yellow wire to another cut half of ignition wire.
- 7. GRAY LABEL WIRE FUEL PUMP DISABLE --

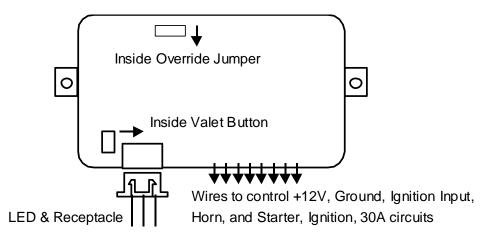
This output can control fuel pump disable, when the system is armed, the vehicle is prevented from any unauthorized starting. these wires with 30 A relay built-in

# FUEL PUMP DISABLE CIRCUIT:



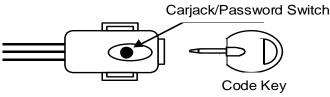
# INSTALLATION DIAGRAM

Below of outlook of the module, wires, receptacle, valet button & override jumper location



## PROGRAMMING

# A. PROGRAMMING CODE KEYS:



LED & Receptacle Unit

To program your new Code Key, the immobilizer system must be in the disarmed state. Once disarmed, program your new code key as follow;

## ENTER:

- 1. Turns ignition key 'OFF-ON' 3 times and stay in ON position.
- 2. Plug in and pull out any Code Key again.

(1 long chirp and LED fast flashing to confirm enter the code key-programming mode.) **PROGRAM:** 

- 1. Plug in the new Code Key. (1 short chirp and LED solid on to confirm programmed.)
- 2. Plug out the new code key (The LED fast flashing again to confirm ready program another new code key.)
- 3. Program the other new Code Keys follow step 1 and 2.

## EXIT:

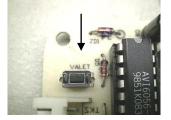
- 1. During programming, turns the ignition key 'OFF' to exit. Or
- 2. Leave it for 15 seconds, the system will automatically exit.
- (A 3 long chirps to confirm exit.)

#### Note:

If more than 4 Code Keys programmed, the latter Code Key will stay but the former code key will void automatically. (e.g. You already programmed 4 Code Keys into the system. You may program additional Code Keys No. 5 and 6 into the system, the Code Keys No. 1 and 2 will be void, and No 3 and 4 will stay.)

# **B. WITHOUT ORIGINAL CODE KEY:**

If you lost your Code Key, you can use the "Emergency Button" to program new code key. Inside Emergency Button:



# ENTER:

- 1. Open the main control unit, and find below "Emergency Button".
- 2. Turn the ignition switch to ON position.
- 3. Press and hold the "Emergency Button" for 2 seconds. (1 long chirp and LED fast flashing to confirm enter the Code Key programming mode.)

## PROGRAM:

- 1. Plug in the new Code Key. (1 short chirp and LED solid on to confirm programmed.)
- 2. Plug out the new code key (The LED fast flashing again to confirm ready program another new code key.)
- 3. Program the other new Code Keys follow step 1.

## EXIT:

1. During programming, turns the ignition key 'OFF' to exit. Or

- 2. Leave it for 15 seconds, the system will automatically exit.
- (A 3 long chirps to confirm exit.)

# C. PASSWORD SETUP:

Your immobilizer system can be disarmed without the use of the Code Key. This is necessary, since you will need the ability to disarm the system if you lose your Code Key.

In order to provide the highest level of security, this system will allow you to program your personal Password Override Code. This code is a (2) digit code. The first digit must be a digit from 1 to 9, and the second digit is a digit from 1 to 9. **ENTER:** 

To program your Password Code, the immobilizer system must be in the disarmed state. Once disarmed, program your Password Code as follow;

## ENTER:

- 1. Turns ignition key 'ON OFF' 3 times and stay in OFF position.
- 2. Plug in and pull out any Code Key 3 times .
- (2 long chirp and LED turns ON to confirm enter the password-programming mode.)

## PROGRAM:

- 1. Within 5 seconds, begin to enter your chosen first 10ths digit by pressing and releasing the Car jack/Password Switch from 1 9 times.
- 2. Within 15 seconds of the last entered 10ths digit, turn the Ignition Switch to ON position.
- 3. Within 15 seconds, enter your chosen second 10ths digit by pressing and releasing the Car jack/Password Switch from 1 9 times.
- 4. Finish by turning the ignition switch to OFF position.

If the new password code was accepted, the unit will report back the newly entered code, by flashing the LED, first indicating the first digit code has been memorized, pause and then the second digit code. The unit will report the new code three times with a one seconds pause between each code. Then the system will begin disarming. Note: If the 15 seconds of inactivity, a 3 long chirps to confirm exit. The unit will revert back to the last successfully stored code.

**EXIT:** During programming, turns the ignition key 'ON' to exit. Or leave it for 15 seconds, the system will automatically exit. (A 3 long chirps to confirm exit.)

## EXAMPLE: To program the Password Code 92, you would;

- 1. Turns ignition key 'ON-OFF' 3 times and stay in OFF position.
- 2. Plug in and pull out any Code Key 3 times . (2 long chirp and LED turns on to confirm enter the Password programming mode.)
- 3. Within 15 seconds, press and release the Car jack/Password Switch 9 times.
- 4. Turn the Ignition switch to ON position.
- 5. Within 15 seconds press the Car jack/Password Switch twice.
- 6. Turn the ignition switch to OFF position.

You will note the LED flashing nine times, pause and then flash two times, pause. This pattern will be repeated three

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times indicating the new code (92) has been accepted and stored in memory.

# D. DELETE PASSWORD CODE (Factory presetting):

The factory preset this system without password code, you must use Code Key to disarm your immobilizer system. To delete your password code, the immobilizer system must be in the disarmed state. Once disarmed, delete your password code as follow;

#### ENTER:

1. Turns ignition key 'ON-OFF' 3 times and stay in OFF position.

2. Plug in and pull out any Code Key 3 times.

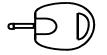
(2 long chirp and LED turns on to confirm enter the password programming mode.)

#### DELETING

Within 15 seconds, Again plug in and pull out any Code Key 5 times. 2 short chirps and 3 long chirps to confirm Deleted the Password Code and exit the delete password code mode.

# **OPERATION:**

#### USING CODE KEY



# A.ARM THE SYSTEM:

There is no need for you to arm the system, it will automatically execute arming each time you turn your ignition key off (after 30 seconds) from the ignition switch.

# **B.USE THE CODE KEY TO DISARM THE SYSTEM:**

When you want to drive your vehicle, and open the door, you will notice the LED with 1 quick flash...pause sequence. The system is in armed condition. You need to disarm the system by using the code key.

- 1. Plug-in and pull out the code key into the receptacle. (System disarmed.)
- 2. LED will starts slow flashing.
- 3. The system preset a 30 seconds that allows you to start the car.

Note: If within 30 seconds, the ignition key is not 'on', this system will automatically arm the system again.

# C. USE THE PASSWORD CODE TO DISARM THE SYSTEM:

In carry this feature you need to program the Password Override Code first. Please see above PROGRAMMING section. Using password to protect system. Below is an example of how to use password to completely disarm system. System in arm condition.

- 1. Enter the vehicle and turn the ignition switch to ON position.
- 2. Within 5 seconds, enter your chosen first 10ths digit by press and release the Car jack/Password Switch.
- 3. Within 15 seconds of the last entered 10ths digit, turn the Ignition Switch OFF then ON.
- 4. Within 15 seconds, enter your chosen second 10ths digit by pressing and releasing the Password Switch.
- 5. Turn the ignition switch to OFF position.
- 6. LED will turns off to indicate the system was disarm.

Note: If some one turn the ignition key off at wrong password code, the system allows him to make 2 mistakes, if third time still wrong, it will automatically shut down for 3 minutes. During the period the system will not accept any correct number.

## EXAMPLE: To program the Password Code 92, you would;

- 1. Enter the vehicle and turn the ignition switch to ON position.
- 2. Within 5 seconds, press and release the Car jack/Password Switch 9 times.
- 3. Within 15 seconds turn the Ignition Switch OFF then ON.
- 4. Within 15 seconds, press and release the Car jack/Password Switch twice.
- 5. Turn the ignition switch to OFF position.
- 6. LED will turns off to indicate the system was disarmed.

# D. VALET THE SYSTEM:

If the vehicle is in maintenance or valet parking, the valet allows the user to by-pass the system. The system will not arm itself.

#### 1. Enter valet:

- a. Then turn ignition key to 'ON' position.
- b. Plug-in and pull out the code key to the receptacle for 3 times.
- c. The LED turns solid 'ON'. System will be on valet condition.

## 2. System during valet:

a. Each time the ignition key turn 'ON', LED solid 'ON' to remind the system is in valet condition

MAR. 01, 2001 b. Each time the ignition key turn 'OFF', LED solid 'ON' for 2 minutes then go 'OFF'. To remind the system is in valet condition

# 3. Exit valet:

a. Turn the ignition key to 'ON'.

- b.Plug in and pull out' the code key to the receptacle for 3 times.
- c. The LED will go 'OFF'. System will be exit valet condition.

# E. LED DISPLAY THE SYSTEM CONDITION:

LED	Indicates
Off	Disarmed while ignition switch is in "on" position.
Slow Flashing	Rearm timing count down.
Fast Flashing	In Programming
1 Quick Flash Pause	Armed
3 Quick flash Pause	Intrusion
Solid On	In Valet Mode And Ignition In 'ON' Position
Solid On For 2 Minutes	In Valet Mode And Ignition In 'OFF' Position

# F. AUTOMATICALLY RE-ARMING:

This system is equipped with a re-arming circuit. It operates as below:

- 1. Turn the ignition 'OFF'.
- 2. The LED starts slow flashing and the automatic re-arming timer begins count down.
- 3. After 30 seconds, the system will armed itself. (LED with 1 quick flash...pause sequence.)

# G. TRIGGER THE SYSTEM:

While the system is in armed condition. Below situation will trigger the system.

1. Without plug-in the correct code key first then turns the ignition key 'ON'

2. Or plug the wrong code key into the receptacle.

# Note:

The vehicle's horn will sound (the installer already wiring an optional relay from module to the vehicle's horn device.) continuously and LED shows 3 quick flashing ... pause signal. The horn will at most sound 3 cycles of 30 seconds then stops. In this situation, you must use the correct code key to disarm system.

# H. SPECIAL CARJACK FUNCTION:

This special design provides an unique security to the system. It is for against carjacking by disable the starter, ignition, fuel pump or other electronic equipment. Also the system will activate the vehicle's horn warning devices. (If the installer already wiring an optional relay from module to the vehicle's horn device.)

You can activate the car jack by press the car jack button 3 times on the receptacle.



How to activate the car-jack:

1. When you are driving, with engine running condition.

2. Press the car-jack button 3 times.

3. After 2 minutes, horn will sound 15 times. (Installer had wiring an optional relay from module to vehicle's horn.)

4. It's a sound warning to the car jacker. (Also a warning to you if you accidentally press the button 3 times.)

5. After 1 minute, engine will completely stops, horn continue sounding.

The car-jacker has to abandon the vehicle, since the system disables the starter's circuit. Re-start the vehicle is also prohibits. Unless system cancels the car-jack.

## How to cancel the car-jack:

1. Turn the ignition 'OFF then ON three times and stay in ON position.

2. With in 10 seconds, plug-in and pull out the code key into the receptacle. (System disarmed.)

# I. COMPLETELY AND PERMANENTLY DISARMS THE SYSTEM.

In case the system can not operate correctly, example, using the correct code key can not disarm the system, and the car can not start. Use the emergency override jumper to permanently disarm the system and allow the car to start. Open the main unit, find out it's inside jumper, as below pictures.

Connect the jumper to left two pins.

Inside normal override jumper position (right 2-pin)



Drive the car to your original installor to check on your system as soon as possible.

For emergency override system connect left 2 pins

