Digital Guard Dawg
Keyless Ignition Installation Guide

For KIM-U and KIM-P Models

DIGITAL Guard Dawg

WORLD LEADER IN KEYLESS TECHNOLOGY

LOSING YOUR KEYS NEVER FELT SO GOOD!

Table Of Contents

Congratulations on your purchase of the Digital Guard Dawg Keyless Ignition System!

In a world where security is a necessity and convenience in high demand, the keyless RFID technology is the perfect security solution.

The KIM series of systems will completely eliminate your bike's ignition switch and all of the hassles associated with using a key forever!

No keys to hassle with, no buttons to push, just absolute convenience and powerful security. Simply carry one of the systems digital RFID Dawg Tags with you. When you're ready to ride just flip your RUN switch ON, Thumb the start button and GO! When your ride is over, kill the bike's engine and just walk away. . .

As you leave proximity of your bike the KIM automatically arms and locks out your bikes entire ignition system! This advanced design provides a much higher level of security than common alarms that simply interrupt your bikes starter. Installation is Easy! We call it "a 2 BEER Install", Simply connect your ignition switch, Stop/Run switch and simply attach a wire to a Ground, and your install is complete!

Digital Guard Dawg is proudly manufactured in the USA to the highest quality standards by people who really care. We use only premium materials and electronic components to ensure you a product of excellent performance and superior life.

Pre-Installation Considerations

Before you being the installation please make sure that you familiarize yourself with the contents in the package and fully read through the manual.

Plug N Play kits contain:

(1) KIM-P Module with (1) Dawg Tag
(2) Harnesses: 1 Ignition switch harness
(1) Stop/Run switch T Harness
(1) 1/4 inch red fork

*** The harnesses pictured above are examples, your kits harnesses may look different.**

** 2004-2009 Victory kits only contain only 1 Plug N Play Harness, that is used for the ignition, you will hard wire your Stop/Run connections.

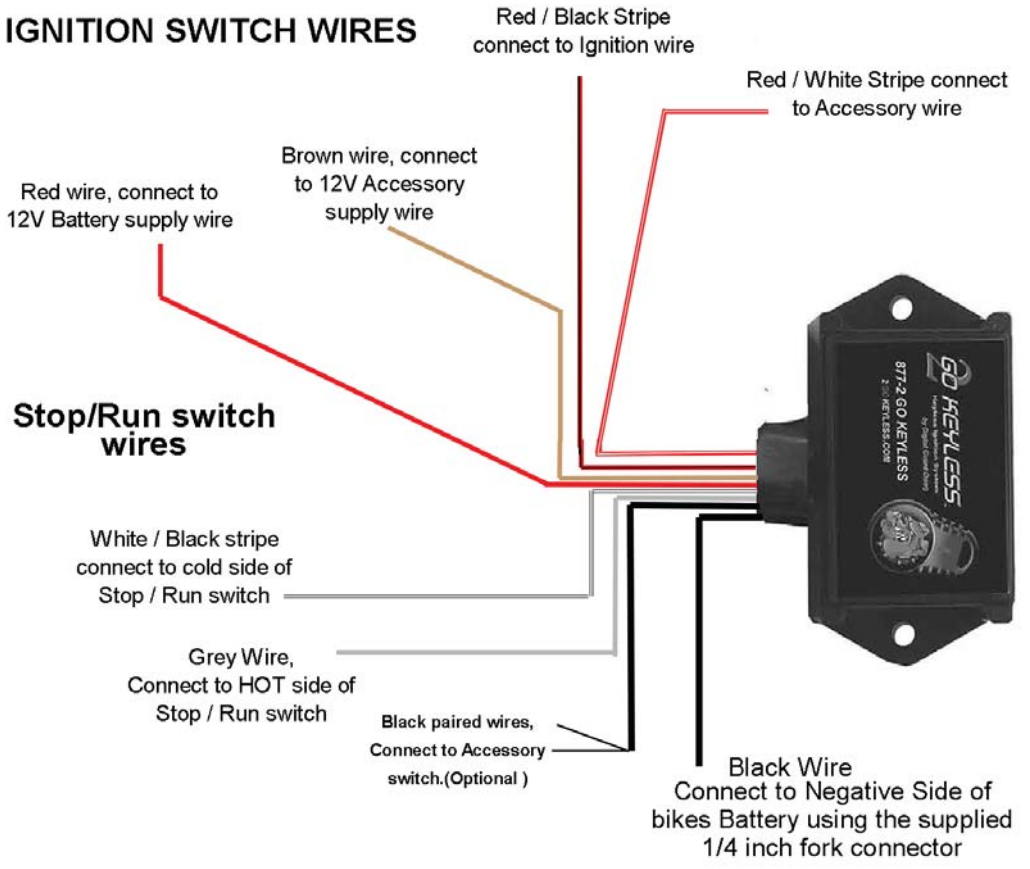
Universal kits contain:

(1) KIM-U Module with (1) Dawg Tag
(5) Red Butt Connectors
(4) Blue Butt Connectors
(1)Yellow Butt Connector
(1) 1/4 inch Red Fork
(1) 100 ohm Resistor

*** Your KIM-U kit comes with white connectors on the end of the ignition and stop/run wires, simply cut these white connectors off so you have individual wires to work with. These white connectors are only used for our Plug N Play Installations.

UNIVERSAL INSTALL
Keyless Ignition Wiring Overview

KIM-U



Universal Keyless Ignition Install Guide KIM-U

Installation consists of Five steps:

1. Mounting the Module
2. Stop/Run switch connections
3. Ignition switch connections
4. Optional Accessory Switch connections
5. Final Testing

Step 1

First locate where you want to mount the module, good locations vary but the rules of thumb are to choose a location that is protected moisture and heat as much as possible, make sure to have a solid surface to mount the module and be within 32" from where you need to make your connections.

Common locations include: Under your seat, in your headlight bucket or fairing.

Before mounting the module, route your wires to where they will need to go so you can ensure that your location will work but also to ensure you will have a clean looking install. You can use Zip ties or even Velcro straps to help hold your wiring harnesses in place.

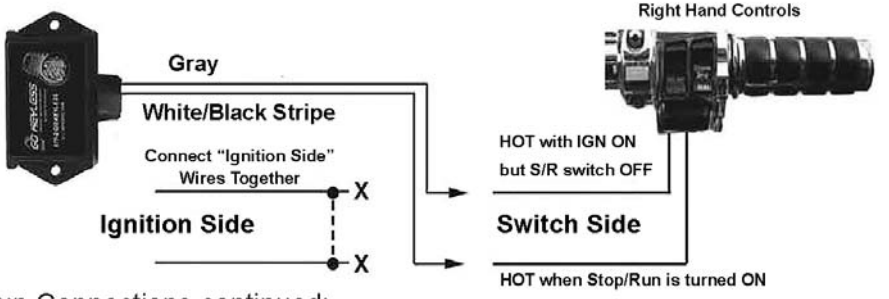
Begin your installation now by attaching the 1/4 inch Red fork to the Black ground wire and run this to the negative side of your battery. Our KIM supplies power to your whole bike, so grounding our unit directly to the battery is crucial.

Stop / Run Connections

KIM-U

STEP 2 *** Prior to making your ignition switch connection you will need to cut off the white connector on the end of your Main Stop / Run (2 wire) Harness.**

Next, you will make the connections between the bikes STOP/RUN switch and the keyless ignition module. You will first need to locate the harness for the right side hand controls leaving the handlebars. Two of the wires in this harness are connected to the Stop/Run switch. It is helpful if you know the wire colors in advance, they can be found on a schematic for your bike. If you do not know the wire colors, you can test using a multi-meter to find them. One of the two wires you are looking for will test HOT (12V) with the key in the ON position but with the Stop/Run switch OFF, this is the wire you will hook up to our Grey wire. The other wire will test hot when the Stop / Run switch is in the ON position and it will not be hot with the Stop/Run switch OFF. Make sure to note which color wires tested correctly.



Stop / Run Connections continued:

1. Cut both identified Stop / Run switch wires at the point where you will be able to make connections. Once cut, you will have two pairs each with two wires, two wires on the "Ignition side" and two on the "Switch side".

2. Turn your bikes Ignition key switch OFF, then using a red butt connector or by soldering, connect both wires on the Ignition side together. TEST this connection is good by turning your key back to ON, the bike should energize if this was done properly.

3. Next use either a red butt connector or solder and connect the Gray wire from the small harness of the KIM module to the "Switch Side" wire going to your Stop / Run switch that was HOT when the key was turned ON.

4. Now, using a red butt connector or solder connect our White/Black stripe wire to the other wire from your Stop / Run switch this is the wire that became hot when the Stop / Run switch was turned ON.

Testing Ignition Key Switch Wires

KIM-U

STEP 3 Next, move to your Key switch. follow the wires coming from the back of the switch until you find a location you can make your wire connections. Once you have your ignition switch wires exposed you will test to verify what wires are which, you can also check our make/model specific information to see if your wires match. Your key switch may have anywhere from two to five or more wires, we will guide you through testing these wires in a few easy steps. You will need a multi-meter or test light. To begin make sure you have a pen handy so you can write down your findings below.

A. With your key switch OFF, test your ignition switch wires for 12 Volts, at least one or possibly two wires will test HOT, write down what color these wires are. **Test at the back of the switch or at the connector but leave the switch connected.**

B. If your key switch has an accessory position turn your key to Accessory *(If your bike does not have an accessory position, skip this step).* Now, test your wires again for an additional wire that is now showing 12 Volts (This is your **Accessory** wire) write down your findings. You will notice that the wires that were HOT previously are still HOT in this step.

C. Next, turn your keyswitch to ON, again test your key switch wires for which additional wires become hot and show12 Volts in the ON position. (This is your **Ignition** wire) Write down your findings

Key OFF	Accessory position	ON position
_____	_____	_____
_____	_____	_____
_____	_____	_____

Making your Ignition Key Switch Connections KIM-U

STEP 3 Continued

*** Prior to making your ignition switch connection you will need to cut off the white connector on the end of your Main Ignition (4 wire) Harness.**

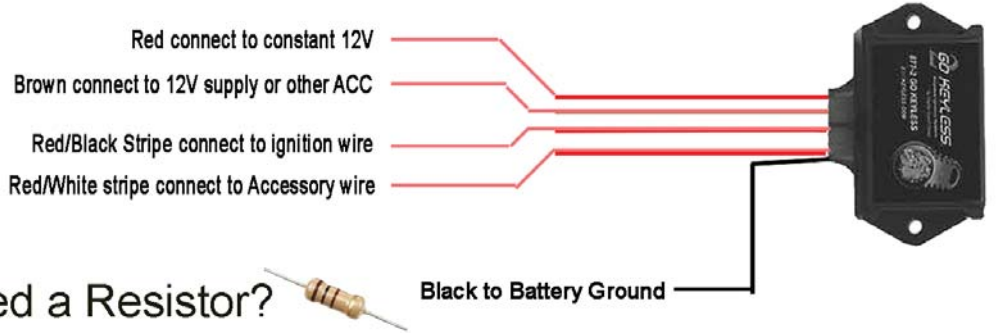
Identifying your Key switch connections:

Step A: If only one wire tested hot with the key switch in the OFF position, you will connect the the Red wire from the KIM main harness to this wire. *** If your Key switch has an Accessory position, also connect the Brown wire to this same HOT wire and make a 3 wire connection.
If Two wires tested hot with the key switch in the OFF position, then you will connect the Red wire from the KIM main harness to one of them and the Brown wire to the other.

***** If your Key switch does not have an Accessory position, you do not need to connect either the Red / White or Brown wires of the KIM main harness for your install.**

Step B: Here we determined your bikes **Accessory wire**. Connect the Red / White wire of the KIM main harness to this wire.

Step C: This step determined your bikes **Ignition wire**, Connect the Red / Black wire of the KIM main harness to this wire.



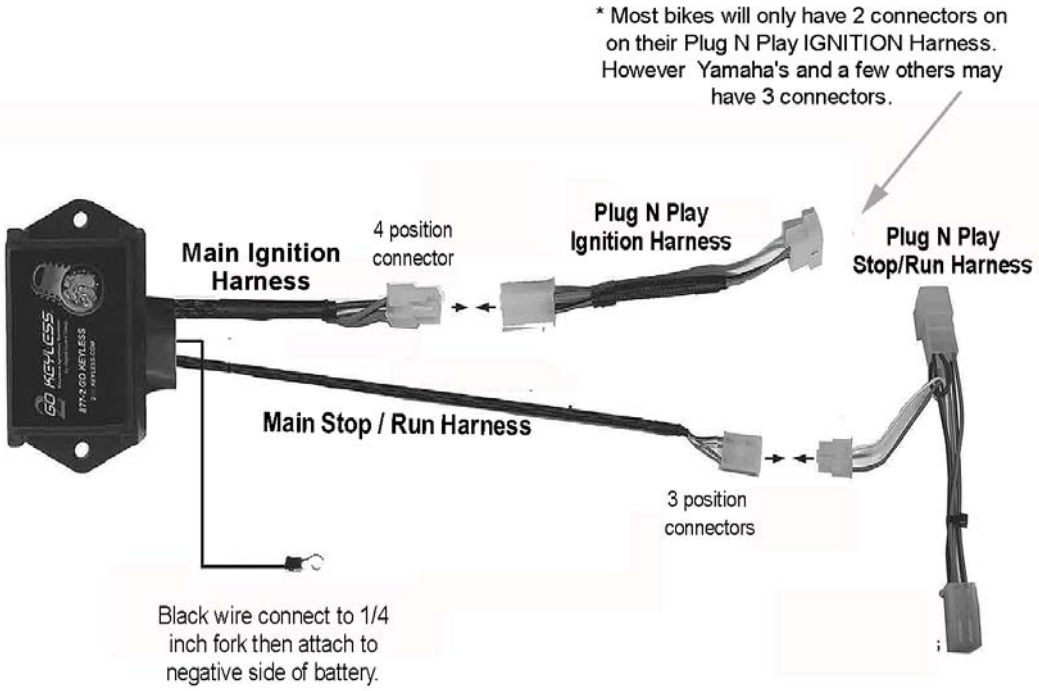
Need a Resistor?

***Suzuki and Kawasaki models made after 2004 may also need an in-line 100 ohm resistor *(included)* to authorize the factory security system. Check on the Make and Model specifics page 18 of this manual to see if your bike needs a resistor. If needed, simply install the resistor in-line as noted. Additional notes and videos can be found at www.DigitalGuardDawg.com / support.**

PLUG N PLAY INSTALL
Keyless Ignition Wiring Overview

KIM-P

The KIM-P Module has two nylon sleeved harnesses exiting the module. A 4 wire **"Ignition Harness"** and a 2 wire **"Stop/Run Harness"**. At the end of each of these harnesses is a white connector. These connect to the two model specific Plug N Play harnesses supplied with your Keyless ignition kit.



Plug N Play Install Guide

KIM-P

Installation consists of Five steps:

1. Mounting the Module
2. Stop/Run switch connections
3. Ignition switch connections
4. Optional Accessory Switch connections
5. Final Testing

*If you bike is a 2004-2009 Victory Please see the Universal install instructions for your Stop/Run Harness Connections

Step 1

First locate where you want to mount the module, good locations vary but the rules of thumb are to choose a location that is protected moisture and heat as much as possible, make sure to have a solid surface to mount the module and be within 32" from where you need to make your connections.

Common locations include: Under your seat, in your headlight bucket or fairing.

Before mounting the module, route your wires to where they will need to go so you can ensure that your location will work but also to ensure you will have a clean looking install. You can use Zip ties or even Velcro straps to help hold your wiring harnesses in place.

Begin your installation now by attaching the 1/4 inch Red fork to the Black ground wire and run this to the negative side of your battery. Our KIM supplies power to your whole bike, so grounding our unit directly to the battery is crucial.

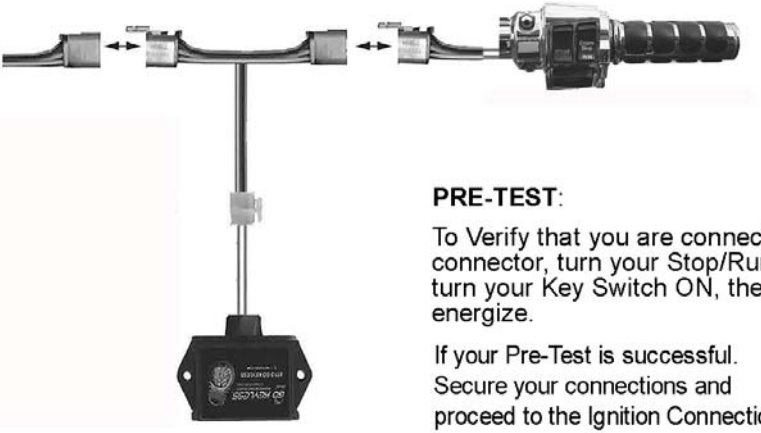
Stop/Run Switch Plug N Play Connections KIM-P

STEP 2 Your Stop / Run Plug N Pay Harness will be the T-Harness provided in our kit that has the white 3 pin connector on the end.

You will notice this connector only has two wires in it, this is intended. This will plug into the 3 pin white connector coming off of your Keyless Ignition Module Stop / Run main harness then into your bikes Right hand control connectors. To locate your bikes Right Hand control connectors, follow the wires exiting from your Right Hand controls until you locate the connectors. These are often located in your headlight bucket, fairing or on some bikes under the fuel tank.

Stop / Run "T" Harness

Once you locate the Right Hand control connector; Release the connector's locking tab and separate them from each other. Next, plug in BOTH ends of the mating connectors form the systems Stop Run "T" Harness. Next, plug the mating 3 pin White connector into the mating 3 pin connector on the end of the systems Main Stop / Run harness.



PRE-TEST:

To Verify that you are connected to the right connector, turn your Stop/Run switch off and turn your Key Switch ON, the bike should energize.

If your Pre-Test is successful.
Secure your connections and
proceed to the Ignition Connections.

**** If for any reason your model specific "T" Harnesses connectors do not match up perfectly, double check to be sure you have the correct harness coming from your Right Hand controls. If you are sure you have the correct Right Hand control harness and feel the connectors still do not match up, give our technical support a call at 877-246-5395.**

Ignition Switch Plug N Play Connections KIM-P

STEP 3 Here you will disconnect the existing key switch and using the Plug N Play Ignition Harness, connect the bikes ignition harness to the Keyless Ignition Module.
Begin by locating the Ignition connector. It is typically located 6"-8" down the ignition harness exiting the back of the bikes key switch. Just follow the wires leaving the back of the key switch until you come to the ignition connectors. These connectors are typically located in the head light bucker or under the gas tank. Once located, unplug the Key switch side of the connector and plug in the mating connector from the Plug N Play Ignition Harness, Then connect the other end of the Plug N Play Ignition "T" Harness to the 4 pin connector of the Main Ignition Harness. Once the Key switch has been unplugged you can remove the keyswitch from the bike if you choose.

*** Some Yamaha and other bikes will have two Ignition connectors. If your bike does, your Ignition "T" harness will also have 2 connectors. Be sure both are connected.

Unplug the bikes Ignition key switch
from the ignition Harness

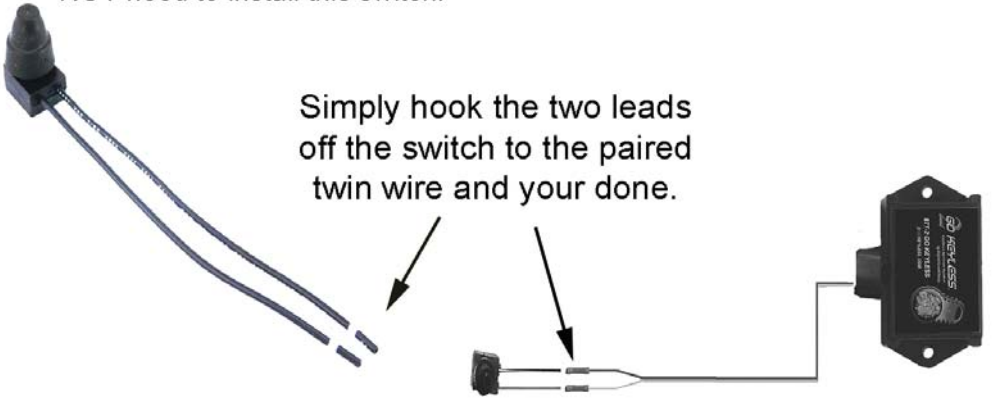
Some bikes may have a second Ignition Switch Connector. If so, your Ignition "T" harness will also have an additional connector. Be sure and connect both

Plug the Ignition Harness into the connector you removed the Key Switch from then plug the other end into Main Ignition Harness of the KIM-P Module

Installing the Optional Accessory Switch **KIM-P & KIM-U**

STEP 4

The Twin pair of black wires coming out of the KIM Module is to add an Optional Accessory Switch. This switch is used to allow you turn on your bikes Accessory circuit independently from the Ignition and the RFID security and leave it on while you are away from your bike. If your bike does not have a Radio or LED's that you plan on running when you are not around, you do NOT need to install this switch.



IMPORTANT NOTE:

If you do NOT plan on installing the optional Accessory Switch make sure to bundle up the wires or cut them short but staggered, you can also cap or tape each of the leads individually.

Staggered

Good

Not Staggered

Bad

Testing your Keyless Ignition Module **KIM-P & KIM-U**

Your system's RFID Dawg Tag transmitter was shipped to you in "Manual mode", if you have already switched it to "Automatic mode" please set your fob back to "Manual mode" for system testing. This mode requires you to press the button on your Dawg Tag when you wish to energize the bike. We will now go through the steps to test the system and make sure everything is hooked up correctly. We will then go through testing "Automatic" mode to allow you to have complete hands-free operation.

1. Put your Stop/Run switch in the Stop position.
2 Wait 30 seconds for the system to arm.
3. Flip the Stop/Run switch to the Run (ON) position and push the start button, the bike should not start
** Depending how your Stop / Run switch is designed, Your starter may "Crank" during this test, but should not Start..*
4. Put the Stop/Run switch back to the Stop position.
5. Push the Large black button on your Dawg Tag until the LED on the tag lights up green.
6. Flip the Stop/Run switch back to the run position, when you do this your bike will energize, press your bikes start button and the bike should start up.

Now switch the Dawg Tag into "Automatic" mode and perform the final system testing.

*****To switch between "Manual Mode" and "Automatic Mode" see instructions on page 15.**

** **Important:** For accurate testing of system range; Final testing should be performed outdoors away from metal buildings, power transformers or other vehicles.*

STEP 5 Final Testing

This test will confirm that your KIM system is working in Automatic mode as well as determine your systems active range. Take your bike outdoors away from any metal buildings.
1. Turn your Stop/Run switch to the Stop position.
2. Take all Dawg Tags and place them 40+ Feet away from the bike and place them on the ground or other stationary surface.
3. Wait 3 minutes, time it with your phone or other clock. (This allows all system timers to all go to sleep)
4. Leaving the Dawg Tags away from the bike; Return to the bike and flip the Stop/Run switch to Run, *Your bike should not energize.*
5. Leaving the Stop/Run switch in the Run position, Walk over and pick up your Dawg Tag and put it in your pocket, Walk back to your bike at a normal pace, when the Dawg Tag enters proximity range your bikes ignition will energize. This distance indicates the systems range as well as confirms the system is working in "Automatic" mode.

Using Your Keyless ignition

KIM-P & KIM-U

One of the most desirable benefits of the Keyless ignition system is its effortless hands-free operation. By simply keeping the Dawg Tag with you, all control of your bikes ignition system and security functions are operated automatically. The Area around your bike (approximately 10') is monitored for the presence of a valid Dawg Tag (one of over 6 billion codes). The system arms and immobilizes your ignition system as the Dawg Tag leaves the monitored area, then disarms and authorizes your ignition when the Dawg Tag returns. With the Guard Dawg Keyless Ignition you can't forget to arm the system!. You're fully protected every time you turn off your bike and walk away!.

While Most Customers prefer to keep their Dawg Tag in Automatic mode, Manual Mode is very convenient when you are going to be near your bike but still want to keep it secure, such as going to a rally or event.

To change which Mode you are in:

Press and hold the button until the LED goes out. Press the button 2 times quick, the LED will flash either 2 or 5 times to Indicating what mode you changed it into.

2 X = MANUAL MODE
5 X = AUTOMATIC MODE

Here is how the system will work for you while in **Automatic Mode.**

The Dawg Tag is both "Proximity" activated and "Motion" activated. With your Dawg Tag in your pocket it senses as you approach your bike and the KIM system will authenticate your Dawg Tag and authorize your ignition. When you hop on your bike and flip your Stop/Run switch your Ignition and Accessory circuits will sequentially power up. Simply thumb your start button and your ready to ride! When your done with your ride, flip your Stop/Run switch to Stop and just walk away, the system will automatically arm itself.

Here is how the system will work for your while in **Manual Mode.**

Manual Mode requires you to press the button on your Dawg Tag whenever you wish to Disarm the bike. When you hop on your bike, pull out your Dawg Tag and press the button, this will give you a 30 second window when for you to hit your Stop/Run switch to Run, when your hit your Stop/Run switch to Run your bike will energize, Next just thumb your start button and your ready to ride! When your done with your ride simply hit your Stop/Run to Stop and walk away from your bike, the system will automatically Arm itself!

Setting and Using your Emergency Bypass Code KIM-P & KIM-U

So that you will never be stranded should you lose your Dawg Tag. The KIM system has a user programmable "Emergency Bypass Code" that can be entered into the system using the bikes Stop / Run Switch. Your systems "Default Code" is listed below with instructions on how to bypass the system should it ever become necessary.
This code can be changed by the user to any two digit code using numbers between 1 – 9.

Your Default Code is: 2 4 **Your chosen code is:** _____

TO USE YOUR EMERGENCY BYPASS: (Default)

Start with your Stop/Run switch in the Stop position and turn it on a total number of **2** times ending in the ON position.

EXAMPLE:
OFF-ON, OFF-ON
Wait 6 seconds. (use your phone or stop watch)
Now turn the Stop/Run switch off and back on **4** times again ending in the ON position.
OFF-ON, OFF-ON, OFF-ON, OFF-ON
Wait 6 seconds. The bike will energize.

Changing your Emergency Bypass Code

Begin by completing the Default Bypass Sequence to power on the Ignition.

Then within 6 seconds of the bike powering ON enter the first number of your desired code.
(for example if you want your first digit to be **4** you would do the following **OFF-ON,OFF-ON,OFF-ON,OFF-ON)**
1 2 3 4

Next wait 6 seconds and enter the second digit number you want for your code.
(for example if you want the second digit to be **3** you would do the following: **OFF-ON,OFF-ON,OFF-ON)**
1 2 3

Wait 6 seconds.

If you have completed the process correctly: The lights on your bike will flash once confirming the you have changed your bypass code.

This code can be changed again at any time, but you must first enter the correct System Bypass Code.

Replacing your Dawg Tags Batteries

KIM-P & KIM-U

Your Dawg Tag has a number of safety features built in make sure that you are never caught off guard by a dead Dawg Tag battery. The first warning sign is that the LED will start to randomly blink red. The second warning sign is that LED will always light up red instead of green, your final warning is that your Dawg Tag will take itself out of Automatic mode and put itself into Manual mode in order to preserve battery life, this will of course require you to press the button on the Dawg Tag to make sure you know that the battery is extremely low. We recommend replacing your batteries once a year.

All of our Dawg Tags take two CR2032 batteries, these can be found at most drug stores. We recommend you to test the batteries with a multi-meter before putting them in your Dawg Tag to ensure they have at least 3.0 Volts. Make sure to take note of the orientation of the batteries that you remove from the Dawg Tags.

When putting New batteries into the Dawg Tag the two positive sides of the batteries both touch the metal pin that goes between the two batteries as shown in the diagram.

Old Style Dawg Tag

Screws

Old Style Dawg Tag

Make and Model Specifics

As many makes and models can differ, for updated or more thorough information please visit our Support section on our website www.DigitalGuardDawg.com.

Bikes with chip in keys are able to be bypassed by either re-flashing the ECU or relocating the immobilizer's antenna.

Resistor circuit Ignitions: various Suzuki and Kawasaki bikes after 2004 may require the use of a 100 ohm resistor in line to accommodate on board diagnostic systems, this resistor is included in the universal kit.

Aprilia:
Aprilias with the "dash immobilizer" can be overridden by a "dummy key".

Kawasaki Common Wire colors:
Our Red/Black to your Brown
Our Red to your White
Our Brown to your Blue
Our Red/White to your Gray with the 100 ohm resistor in line.

Suzuki GSXR's:
Most connectors for the PlugNPlay Kits will be found under the air box/under the tank. Check our support page on the website for a video.
Suzuki Common Wire colors:
Our Red/Black to your Orange
Our Red to your Red
Our Brown to your Orange/Green
Our Red/White to your Brown
*connect 100 ohm resistor between our Red/White to your Orange/Yellow.

Yamaha:
Most Connectors for Yamaha PlugNPlay systems can be found on the left side of the tank.
Yamaha Common Wire colors:
Our Red/Black to your Brown or Blue/Brown
Our Red to your Red
Our Brown to your Blue/Yellow
Our Red/White to your Blue/black

Triumph:
Due to the common change of wire colors on triumphs please visit our website support section for more in-depth information on wiring.
Triumph Common Wire colors:
Our Red/Black to your Blue
Our Red to your Red
Our Brown to your Red
Our Red/White to your Gray/Blue & Blue/Orange

Make sure to read through this manual for testing ignition wires on triumphs as they tend to change wire colors in between connectors.

Honda Common Wire colors:
Our Red/Black to your Blue
Our Red to your Red
Our Brown to your Red
Our Red/white to your Gray/Blue & Blue/Orange

Harley:
Most 2012 and Newer Harley's are CANbus, to verify check to see if your bike has a starter relay in the fuse box, if it has one you do not have CANbus.
Harley Common Wire colors:
Our wire colors match factory Harley colors.

CANbus BIKES

KIM-U

The following only applies to CANbus Bikes.

If your bike is CANbus driven such as BMW's, 2013+ Harley's or CanAm's you will need to install a additional 12V rated Latching Switch to use instead of using the bikes Stop/Run switch. many customer choose one of our Automotive Billet Buttons.

Stop/Run Connections

The Gray and the White/Black stripe Stop/Run wires from our unit will go to your 12V rated latching switch.

Other Connections

Our Red wire will go to Battery 12V

Our Black Wire will go to the negative side of you battery.

Cut the Optional accessory switch wires off but make sure to stagger them, cap or tape the ends.

Ignition Connections

Your bikes Ignition Switch will only have two wires, you will run one of your wires to our Brown wire and the other to our Red/White stripe wire.

Due to your bike being Data Driven your Stop/Run switch is not Rated for 12V. The Latching 12V rated switch you install will become your bikes ON/OFF switch. We highly recommend using a switch with an LED to easily tell whether you have it turned on or off.

*to wire up the LED on a latching switch wire the Positive for the LED to our White/Black stripe and run the Negative on the LED to a constant Ground.

Operating the system; As you approach the bike our unit will automatically detect you are there carrying the Dawg Tag, hit your On/Off (latching switch you installed) hop on your bike thumb your start button and you ready to ride. Your Original Stop/Run switch will still operate the bike however make sure when you walk away from the bike you remember to turn our ON/OFF switch off to ensure you bike is protected.

If you are unsure if your bike is CANbus driven give our Technical Support a call at 877-246-5395

Trouble Shooting

KIM-P & KIM-U

Common issues are fixed by doing the following:

If you encounter an issue when using or installing our system make sure that you are grounding the system directly to the battery, a chassis ground is NOT a good ground for the KIM system.

Make sure to check all of your fuses.

Ensure that all your connections are snug.

Ensure that while accessing the needed wires or connectors that you did not accidentally unplug another connector on the bike.

Make sure your bikes battery has at least 12.0 Volts.

If you still have questions or issues please visit the Support section of our website at www.DigitalGuardDawg.com / Support or give us a call at 877-246-5395.

Contact Information:

Hours of Operation: 10Am to 4:30 PM
Pacific Standard Time

Phone Number: 916-337-1040

Email: Salesdesk@DigitalGuardDawg.com

Website: www.DigitalGuardDawg.com

Address: 1079 Sunrise Ave STE B326
Roseville CA, 95661.

Toll Free at: 877-246-5395

Be sure and Register Your Product At:
www.Digitalguarddawg.com/product-registration/

WARRANTY

Digital Guard Dawg Inc. Warrants this system against manufacturing defects and workmanship for one full year from the date of purchase. this warranty is limited to the original purchaser of the security system. Proof of purchase is required. the Installed vehicle must be registered with the State Department of Motor Vehicles.

We are not in any way a representative of the Harley-Davidson Motor Company ® or any other motorcycle manufacturer. All words used on our materials denoting any manufacturer, models or motorcycle are intended for use as reference only. We are not an authorized Harley® dealer or in no way do we have, or intend to imply any king of business relationship with Harley-Davidson Motor Company®. All trademarks, registered trademarks and brand names used herein are the property of their respective holders. Digital Guard Dawg ™, Dawg Tag ™ and Personal recognition systems ™ are trademarks of Digital Guard Dawg Inc.

"This device complies with part 15 of the FCC rules. Operation is subject to the following conditions (1) This device may not cause harmful interference, and (2) this device must accept any interference that may be received including interference that may cause undesired operation" Caution: changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

DIGITAL

Guard Dawg

World Leader In Keyless Technology

www.DigitalGuardDawg.com

877-246-5395

Proudly Made In The USA

KIM-U ☐ KIM-P ☐

Make: _____

Model: _____

Year: _____

For a large print manual please visit:
www.DigitalGuardDawg.com