

2 GO KEYLESS™



DGD-KIM

**Keyless Ignition Module
Installation Guide**



877-2 GO KEYLESS
2GOKEYLESS.COM

DIGITAL
Guard Dawg™
KEYLESS SECURITY PRODUCTS

Digital Guard Dawg Keyless Ignition Module Overview

These wires will connect to the wires from your existing Key Switch.

- RED / BLACK Stripe
Connect to IGNITION Wire
- RED
Connect to 12V IGN Supply Wire
- BROWN
Connect to 12V ACC Supply Wire
- RED / GRAY Stripe
Connect to ACCESSORY Wire

These wires will connect to your STOP/RUN Switch.

- GRAY
Connect to Hot Side*
STOP / RUN Switch
- WHITE / BLACK Stripe
Connect to Cold Side
STOP / RUN Switch

* Wire will test HOT with in the STOP position.

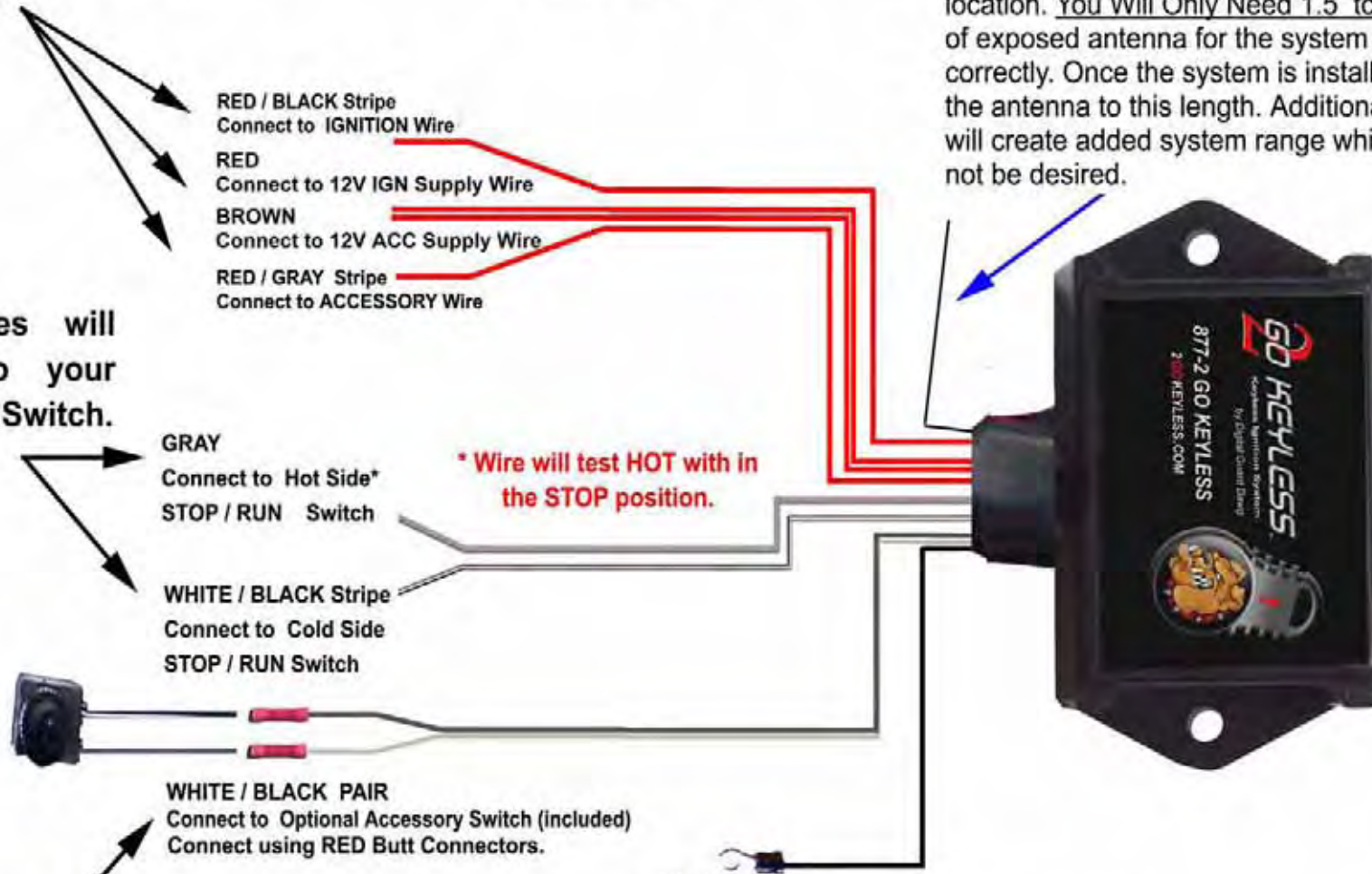
- WHITE / BLACK PAIR
Connect to Optional Accessory Switch (Included)
Connect using RED Butt Connectors.

This is the optional Accessory Switch.

- BLACK
Connect to - NEGATIVE BATTERY / GROUND
Connect using "U" Connector

*** IMPORTANT NOTE: TRIMMING YOUR ANTENNA

The thin 8" black wire is the systems antenna. It has been left long so that if the module is mounted behind metal, the antenna can be extended to an unobstructed location. You Will Only Need 1.5 to 2 inches of exposed antenna for the system to operate correctly. Once the system is installed, trim the antenna to this length. Additional antenna will create added system range which may not be desired.





Keyless Ignition Module

Installation consists of five step;

1. Mounting the Module
2. STOP/RUN Switch Connections
3. Ignition Key Switch Connections
4. Installing the Accessory Switch (*optional*)
5. Final Testing

***Some pages in this manual pertain only to Harley-Davidson® installation and are indicated with the shield symbol.



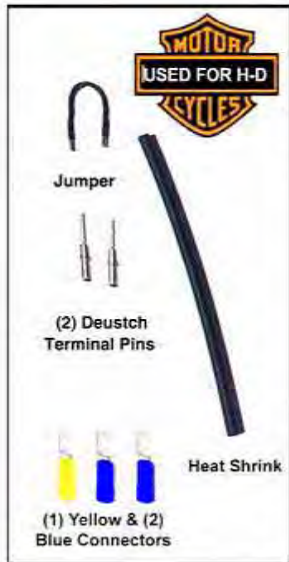
Familiarize yourself with all the package contents. Your first task will be to determine "Where" you will mount the systems module. Good locations can vary greatly from bike to bike, but the rules of thumb are: A. Choose a location that is protected from moisture as much as possible. B. Make sure you have a solid frame member or other surface you can secure the module to using Zip-ties or screws. C. Choose a location that is within 32" of the existing Ignition Key Switch.

Contents

Dawg Tag Transmitter



Keyless Ignition Module



Accessory Control Button

- (1) 12 Ga Yellow Self Sealing Butt Connector
- (3) 14 Ga Blue Self Sealing Butt Connectors

(1) "U" Ground Connector

(5) Red Butt Connectors

Tools you will need:



Various Wrenches & Sockets



Crimp Tool



Screw Drivers



Heat Gun



Wire Strippers



12V Test Light

Step 1

Your first installation step will be to secure the system module to your chosen location. Plan your wire routing in advance and check for adequate wire length to each connection point. Once your module is mounted, trim your system antenna to expose only 1.5 - 2 inches of wire as noted on the previous page. Next, proceed to Step 2 "Stop / Run Switch Connections"



STEP 2 Generic STOP / RUN Switch Connections

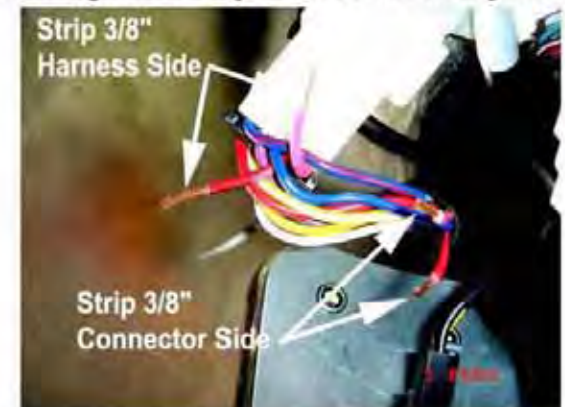
GRAY
Connect to Hot Side*
STOP / RUN Switch

WHITE / BLACK Stripe
Connect to Cold Side
STOP / RUN Switch



Here you will make the connections between the bikes STOP/RUN switch and the Keyless Ignition Module. You will first want to locate the harness for the RIGHT SIDE hand controls leaving the handlebars. Two of the wires in this harness are from the STOP/RUN switch. It is helpful to know the wire colors in advance, typically they can be found on a schematic for your bike. If you are testing to locate these wires, during probing. One wire should always test "Hot" when the Key switch is turned ON, and the other should only test "hot" when the STOP/RUN switch is turned to ON. *****Note which color wire is the Hot with Key On and which is Hot with Switch On.** On many bikes these wires run to a connector that is often inside the headlight. Once you have located your STOP/RUN switch wires, follow the direction below for making your connections:

1. Cut both STOP/RUN switch wires at the point you plan to make your connections. *(make sure and leave enough room to make connections)*
2. Strip 3/8" of insulation from both ends of the cut wires.
3. Determine which is the "Switch Side" (wires leading to the Stop/Run switch) and which is the "Harness Side" (wires going to the bikes power box) of the wires you have cut.
4. Turn OFF your Key Switch and using the RED butt connector provided or by soldering, Connect both of the "Harness Side" wires together. *(Once this is done your bike should power up by simply turning on your key switch)*
5. Next, using a RED Butt connector or by soldering, Connect the GRAY wire from the Keyless Module to the "Switch Side" wire that supplies +12 volt power to the Stop/Run switch. This is the wire that tested Hot with the Key On
6. Now, using a RED Butt connector or by soldering, Connect the White / Black stripe wire from the Keyless Module to the "Switch Side" wire that returns 12 volts from the Stop/Run switch. This is the wire that tested Hot with the Stop/Run switch in RUN position.





STEP 2 for HARLEY-DAVIDSON®

STOP / RUN Switch Connections on bikes with DEUTSCH Connectors

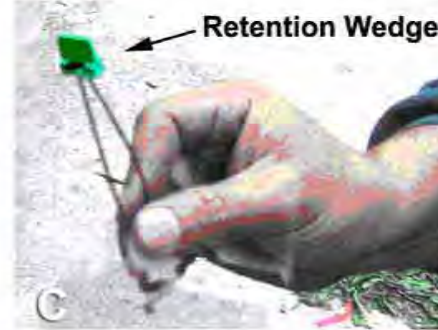


GRAY
Connect to Hot Side*
STOP / RUN Switch

WHITE / BLACK Stripe
Connect to Cold Side
STOP / RUN Switch



Here you will make the connections between the bikes STOP/RUN switch and the Keyless Ignition Module by replacing 2 terminal pins in a 6 terminal black "Deutsch" connector. This commonly used connector may be located in various locations. But it is always located somewhere along the harness from the RIGHT SIDE hand controls leaving the handlebars. PIC "A" Once located, unplug the connector, Next, remove the retention wedge from the center of the PIN END of the connector. You can use a hook tool, or make one out of a paper clip or other metal wire like the one pictured. PIC "B&C".



Next, use a small flat blade screw driver an lift the retention tabs on the White/Black Stripe wire while gently pulling the wire from the back of the housing. It should pull out of the rubber weather seal with only MINOR friction. Next, remove the Gray wire pin the same way. PIC "D" Next, take the Gray and White/Black stripe wires from the Keyless Ignition Module cut them to length, strip 3/8" of bare wire and crimp on the Deutsch terminal Pins supplied with your system. PIC "E" Next, replace the removed Deutsch connector pins with the newly crimped pins. Gray to Gray, White/Black to White/Black. Just push the wire into the empty pin terminal until the tab clicks down. PIC "F" Next, Replace the retention wedge into the middle of the connector and push it down flat until it clicks. Now reassemble that connector.



Your final step is to re-connect the two original extracted wires. This is done by using the supplied Jumper Wire. Pic "G". Put one end over the Gray terminal pin, and one end over the White/Black terminal pin. Use the included heat-shrink to cover both pin assemblies and to hold the jumper in place. Heat with hair dryer or heat gun for firm fit.

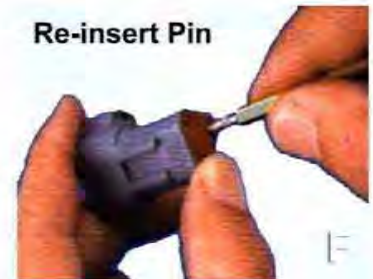


Jumper Wire

Heat Shrink
completely
over jumper
ends



Re-insert Pin



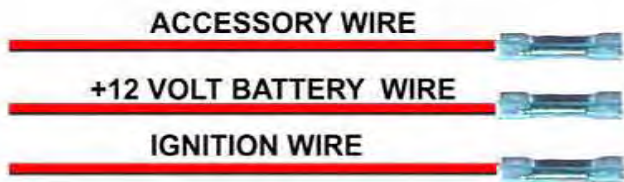
STEP 3 Generic

Ignition Key Switch Connections

Here you will cut the wires currently going to your Ignition Key Switch and reconnect them to the Digital Guard Dawg Keyless Ignition Module. Before you begin; REMOVE YOUR BIKE MAIN MAXI FUSE FROM THE FUSE BLOCK. Next, crimp the "U" connector provided onto the Modules Black ground wire, then attach it to the Negative (-) terminal of the bikes battery. Next, you will need to locate and access the wiring harness going to your ignition key switch, there will be 3 or more wires. You will need to make connections to these wires so locate a point where you can freely work with these wires. You will need to find out which one is Ignition, which is Accessory and which is +12 Volt. If no schematic is available, this can be determined by using your test light to test the existing Key Switch and see which wire supplies power to each different Key position. ie OFF / ACC / ON

See "**Ignition Switch Connections**" page in this manual for specific connections for your motorcycle brand.

Cut the wires at your ignition switch.



Re-attach each of the cut wires to the corresponding Keyless Ignition Module wire. Use the Waterproof Self sealing butt connectors provided,

Crimp tightly then use a heat gun or blow dryer to activate sealer.



- RED / BLACK Stripe
Connect to IGNITION Wire
- RED
Connect to 12V IGN Supply Wire
- BROWN
Connect to ACC Supply Wire
- RED / GRAY Stripe
Connect to ACCESSORY Wire

Once the key switch has been disconnected it can be removed from the bike.

BLACK / System Ground
Connect to Neg (-) Battery Terminal



STEP 3

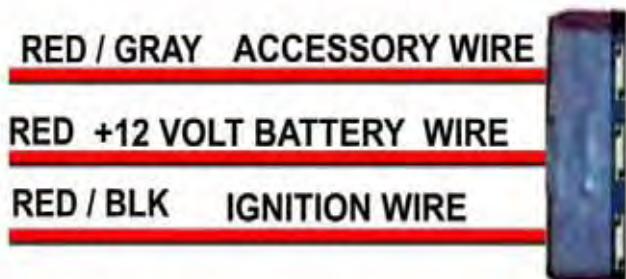


Ignition Key Switch Connections

for HARLEY-DAVIDSON®

Harley Davidson the wire colors will match the Digital Guard Dawg Wiring.

Here you will attach the wires currently going to your ignition Key Switch and re-connect them to the KIM Module. BEFORE YOU BEGIN REMOVE YOUR BIKES main MAXI FUSE FROM THE FUSE BLOCK. Next, crimp the "U" connector provided onto the Ground wire then attach to the (-) Negative terminal of the bikes battery. Next, locate the ignition switch wire harness. On HD there is usually a connector with three wires going to your ignition switch. Unplug this connector and remove the ignition switch. Cut the power wires of the KIM module to the desired length and re-attach each to the matching HD color wires. You should attach both the RED and the BROWN wires from the KIM module to the RED wire at the connector since these are both 12V supply wires on Harley-Davidson. Either solder or use the 1/4 male spade connectors to make your connections.

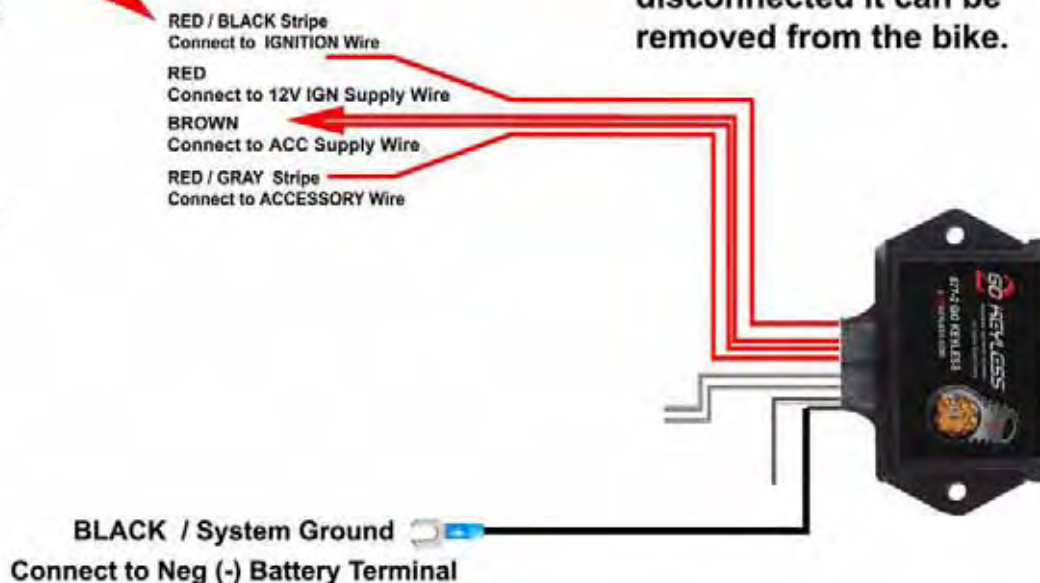


If using the spade connectors, also slide the 3" piece of large heat shrink over your connections and use a heat gun to shrink.

* For additional protection you can fill the heat shrink with a neutral cure RTV silicone.



Once the key switch has been disconnected it can be removed from the bike.



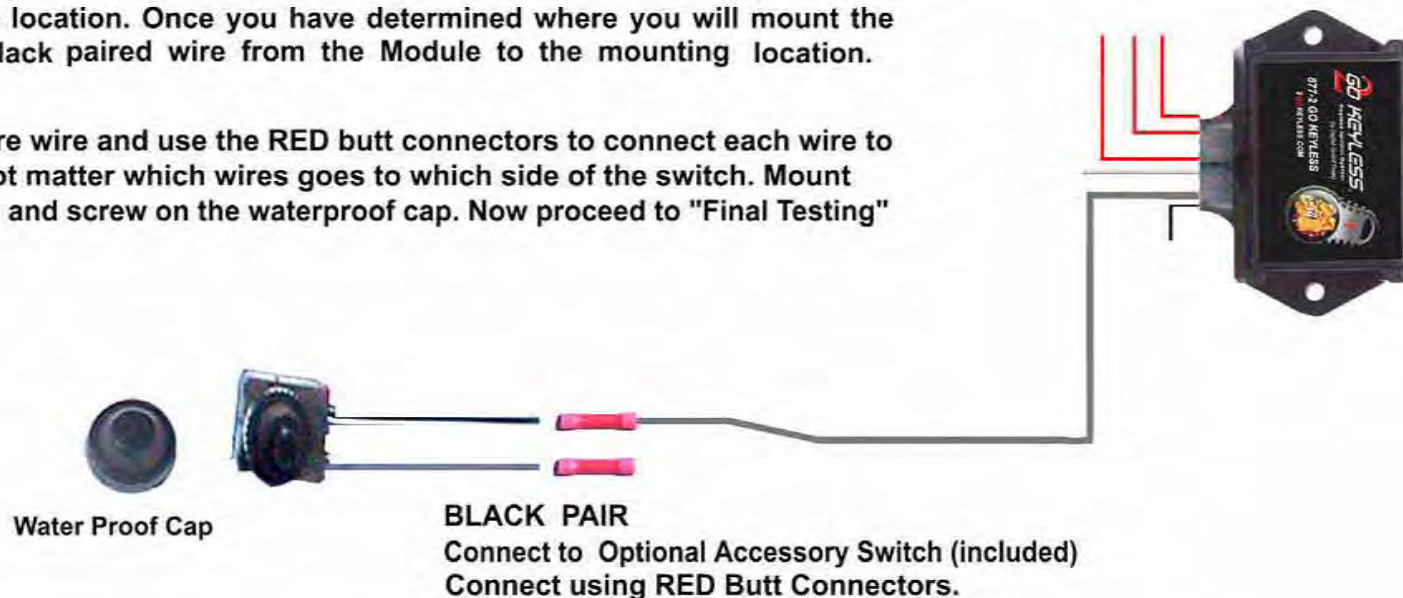
Installing Accessory Switch (Optional)

STEP 4

Here you can add an optional Accessory Switch. If this Accessory circuit is NOT added to the installation, your Accessory circuit will automatically come on and go off as you turn your STOP/RUN Switch On/Off with your Dawg Tag is present. If the Accessory Switch is added it allows you to turn your Accessory circuit ON/OFF without requiring that your Dawg Tag is present. This can be desirable for several reasons. 1. It can allow independent control of a Radio / CD player or LED lighting when the bike is OFF. 2. It can be used to provide a way to override the H-D Factory security system in the event of a TSSM problem on the bike.

To add the Accessory Switch, first decide where you will mount it. It has a lock ring to secure it through a hole. This switch is similar to the switch that is used on many of the newer H-D models for the odometer reset switch and often mounts nicely on your gauge assembly. Some riders prefer to hide the switch under a seat edge or in a similar less obvious location. Once you have determined where you will mount the switch, route the Black paired wire from the Module to the mounting location.

Now, Strip 3/8" of bare wire and use the RED butt connectors to connect each wire to the switch. It does not matter which wires goes to which side of the switch. Mount the Accessory switch and screw on the waterproof cap. Now proceed to "Final Testing"



DGD-KIM Ignition switch connections by manufacturer.

GENERIC 3 WIRE Ignition Switch

- HC-1 RED / BLACK
Connect to IGNITION Wire
- HC-2 RED
Connect to +12V from Battery
- HC-3 BROWN
Connect to +12V from Battery
- HC-4 RED / GRAY
Connect to ACCESSORY Wire

HARLEY-DAVIDSON / BUELL

- HC-1 RED / BLACK
Connect to RED / BLACK
- HC-2 RED
Connect to RED +12V
- HC-3 BROWN
Also connect to RED +12V
- HC-4 RED / GRAY
Connect to RED / GRAY

HONDA Ignition Connections

- HC-1 RED / BLACK
Connect to BLUE IGNITION
- HC-2 RED
Connect to RED +12V
- HC-3 BROWN
Connect to RED +12V
- HC-4 RED / GRAY
Connect to both GRAY/ BLUE & BLUE / ORANGE

YAMAHA Ignition Connections

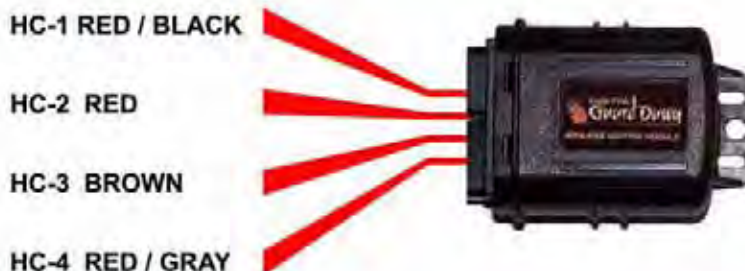
- HC-1 RED / BLACK
Connect to BROWN or BLUE / BROWN IGNITION
- HC-2 RED
Connect to RED +12V
- HC-3 BROWN
Connect to BLUE / YELLOW
- HC-4 RED / GRAY
Connect to BLUE / BLACK

TRIUMPH Ignition Connections

- HC-1 RED / BLACK
Connect to BLUE IGNITION Wire
- HC-2 RED
Connect to RED +12V
- HC-3 BROWN
Connect to RED +12V
- HC-4 RED / GRAY
Connect to GRAY/ BLUE & BLUE / ORANGE Wires

*** Connect remaining wires from the Ignition switch.
Connect the RED / ORANGE to the RED / BLUE

DGD-KIM High Current Harness



Resistor Circuit Ignitions:

Various Suzuki & Kawasaki after 2004 may require the additional use of a 100 Ohm Resistor in line to accommodate on board diagnostic systems. (resistor Included)

SUZUKI Ignition Connections

- HC-1 RED / BLACK
Connect to ORANGE
- HC-2 RED
Connect to RED +12V
- HC-3 BROWN
Connect to ORANGE / GREEN
- HC-4 RED / GRAY
Connect to BROWN

* Additional Resistor Notes

Connect the 100 Ohm Resistor between the HC-4 RED / GRAY and the ORANGE / YELLOW Ignition wire.

KAWASAKI Ignition Connections

- HC-1 RED / BLACK
Connect to BROWN
- HC-2 RED
Connect to WHITE +12V
- HC-3 BROWN
Connect to BLUE

* Additional Resistor Notes

Connect the 100 Ohm Resistor between the HC-4 RED / GRAY and the GRAY Ignition wire.

Testing your Keyless Ignition Module:

***** Before Testing your system, replace the Maxi fuse and be sure to have trimmed your system antenna as explained on page 2.**

Testing Step 1. Initial System Testing

1. Put the RUN/ STOP switch to STOP position.
2. Wait 30 Seconds for the system to ARM.
3. Flip the STOP/RUN to RUN and push your “Start” button (your bike should not start)
4. Put the RUN/ STOP switch back to STOP position.
5. Push the Label on the face of the Dawg Tag until the LED lights.
6. Flip the STOP/RUN to RUN and push your “Start” button (your bike should start)

Putting your Dawg Tags into “Automatic” Mode

Your Dawg Tags were shipped in “**Manual**” Mode. This is why you have needed to push the Dawg Tag label to get your bike to operate during system testing. Once you have completed initial system testing, you will want to switch them into “**Automatic**” mode for final testing and to use your system in a completely “**Hands Free**” manner.

***** READ SWITCHING FROM “MANUAL” MODE TO “AUTOMATIC” MODE BELOW.**

Switching from “Manual” mode to “Automatic” mode.

You can Check which mode your Dawg Tags are in and Switch modes:

How to check which mode your system is in:

You can check which mode your Dawg Tag is in by following the procedure below:

1. Firmly push and hold the label on the Dawg Tag until the LED goes OUT. (approximately 6 seconds),
 2. Quickly, push the label 3 times, Then, COUNT HOW MANY TIMES THE LED FLASHES
- The Dawg Tag will Flash 5 X if it is in “Manual” mode and 3 X if it is in “Automatic” mode.

Switching from “Manual” mode to “Automatic” mode.

1. Firmly push and hold the label on the Dawg Tag until the LED goes OUT. (Approximately 6 seconds)
2. Quickly, push the label 3 times,
3. Let the Dawg Tag complete its flashing, (3 or 5 times depending on current mode)
4. Again, push the label 3 times, then watch for the LED to “Flicker” confirming the mode has changed.

(If you are in doubt as to whether you switched modes, simply repeat the procedure and count the flashes).

5. The Dawg Tag can be toggled from “Manual” mode to “Automatic” mode and back again by simply repeating this procedure. *** If you purchased multiple Dawg Tags you may want to only put one of them into “Automatic” mode. This will extend battery life during storage.

STEP 2. Final Testing “IGNITION” With The Dawg Tag in “Automatic” mode

1. Turn your Stop/Run to STOP
2. Take all system Dawg Tags and place them 40 feet away from the bike.
3. Wait 30 Seconds for the system to ARM.
4. Flip the STOP/RUN to RUN and push your “Start” button (your bike should not start)
5. Walk over and pick up the Dawg Tag, Give it a slight shake to activate the motion sensor and walk back to your bike,
6. Flip the Run/Stop Switch to the Run and Start your bike.
7. 1. Turn your Stop/Run to STOP. Engine should turn off and all lights should turn off.

STEP 3. Final Testing “Accessory”

1. Turn your Stop/Run to STOP
2. Take the all system Dawg Tags and place them 40 feet away from the bike.
3. Wait 30 Seconds for the system to ARM.
4. Push the accessory button. All Accessory lights and functions should activate.
5. Push the accessory button again. The entire bike should be “OFF.”

STEP 4. Checking and Adjusting System Range

The thin 8" black wire is the systems antenna. It has been left long so that if the module is mounted behind metal, the antenna can be extended to an unobstructed location. You Will Only Need 1 1/2 to 2 inches of exposed antenna for the system to operate correctly. Once the system is installed, trim the antenna to this length. Additional antenna will create added system range which may not be desired.

***** Range Testing assumes that your system antenna is trimmed to approximately 1.5" - 2" of exposed wire.**

1. Turn your Stop/Run to STOP
2. Take all active system Dawg Tags and place them 40 feet away from the bike.
3. Have someone sit on your bike and turn your Stop/Run to RUN and HOLD DOWN the “Start” Button.
4. Pick up the Dawg Tag, give it a slight shake to activate the motion sensor, and **slowly** walk towards your bike (**approximately one step per second**) and note when the bike powers up.

***** Additional fine tuning adjustments can be made to Increase or Decrease system range. See the “Adjusting System Range” page in the back of this manual.**



DIGITAL Guard Dawg™

PERSONAL RECOGNITION SYSTEM

If you have the Digital Guard Dawg Option, Please read the following pages:

Using the System

Day to Day Operation

One of the most desirable benefits of the Digital Guard Dawg™ system is its effortless, hands-free ease of operation. By simply keeping the Dawg Tag™ with you, all security functions of Arming and Disarming your system are completely automatic. Without doing anything, your bike's protected every time you turn off your Stop / Run switch and just walk away!

Automatic & Manual Modes

Your Dawg Tag can be used in either Automatic or Manual modes. "Manual" mode gives you complete control of when your system activates regardless of range. When your Dawg Tag is in Manual mode you must "Push" the label on the front of the tag before your bike can be started. *(The ! LED will light up)*. Additionally, when in Manual mode, your bike will automatically Rearm 30 seconds after the STOP/RUN switch is turned OFF, even when you are near your bike. On occasions where you may be close to your bike, yet want to assure that your system can't be activated, Manual mode is your answer. Manual mode can also be quite helpful during system installation and initial testing.

How it Works

The area around your bike (approximately 10 feet) is monitored for the presence of your Dawg Tag™. (One of over 6 Billion unique codes). The system Deactivates your Ignition after your Dawg Tag™ leaves the monitored area around the bike and Activates again when the Dawg Tag™ returns.

***** Important Note:** The Dawg Tag in "Motion Activated" and begins trying to communicate with the "Smart Relay" only when it detects movement, *(such as when you are walking towards your bike)*. If the Dawg Tag™ remains completely motionless for over two minutes, it will stop trying to communicate with the "Smart Relay" until it detects movement again, even if it is within the monitored area.

Example: If you are standing next to your bike, but are standing virtually "Motionless" the Dawg Tag may go to sleep. When you flip the Stop / Run switch the system may not immediately activate. If this happens, simply give your pocket containing the Dawg Tag a "Pat" to wake it up.

FAQ's

Is my Dawg Tag™ supposed to Rattle?

Don't worry, nothing is broke. The noise you hear when you shake your Dawg Tag™ is just the motion sensor.

Do I ever have to replace the battery in my Dawg Tag™?

Your Dawg Tag™ contains a lithium battery designed for operational life of 1 to 3 years depending on use. Battery status can be tested by pressing the hidden button and observing the LED. **If the LED lights up solid your battery is Good if the LED flashes, flickers or fails to light up, the battery is "Weak" and should be replaced.** The battery is a CR 2450 Lithium cell and can be purchased at most drug or electronic stores, Radio Shack™ etc.

To replace your battery, just remove the two screws in the back of your Dawg Tag™ and exchange the battery, making sure to put it in with the same side up, and screw the case back together.



What happens if I lose my Dawg Tag™?

No problem, we can start you right over the phone, just like magic! Put this phone number in your wallet and call our Service Hotline 916-337-1040 if you ever need assistance.

What if I have difficulty starting my bike?

Should you ever experience momentary difficulty in starting your motorcycle, Don't Panic. This is caused by one of two reasons and is easily solved. Momentary difficulty starting your motorcycle may be caused by interference from outside radio signals (random RF) much like interference you occasionally get on your cell phone. This can occur if you are parked near a powerful commercial radio tower or near high power radio equipment such as in police or other emergency vehicles. These random RF transmissions can interfere with Digital Guard Dawg's™ automatic disarm signal and prevent you from immediately starting. The second reason you could experience difficulty is a weak battery in your Dawg Tag™. **Either of these conditions is easily solved by simply boosting the Dawg's disarm signal.**

To boost your disarm signal, simply push the hidden button located behind the label on your Dawg Tag™ as shown. The LED above the button will light up and you will instantly be able start your motorcycle.

If I drop my Dawg Tag™ will my bike shut off?

NO! for safety reasons, once the Dawg Tag has authorized the ignition the bike will not shut off or rearm until 30 seconds after YOU shut off the bike.

Can I get additional Dawg Tags™?

You can always add additional Dawg Tags™ to your system or get a second Smart Relay for an additional motorcycle and cross program them to all work together. Just call **Customer Service at 916-337-1040**

Will my insurance company give me a discount?

Digital Guard Dawg™ is a "Passive Starter Interrupt System", the most advanced on the market. Many insurance companies give discounts up to 25% off comprehensive coverage for a system of this type. Check with your individual insurer for specific discount information.

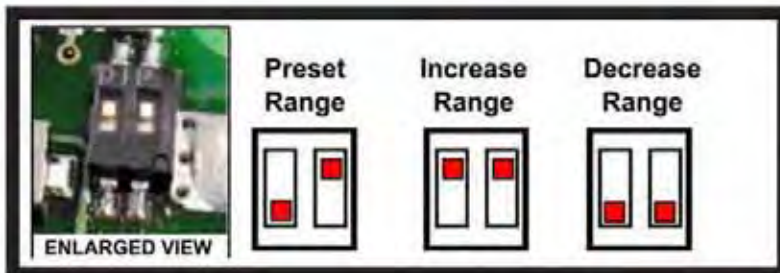
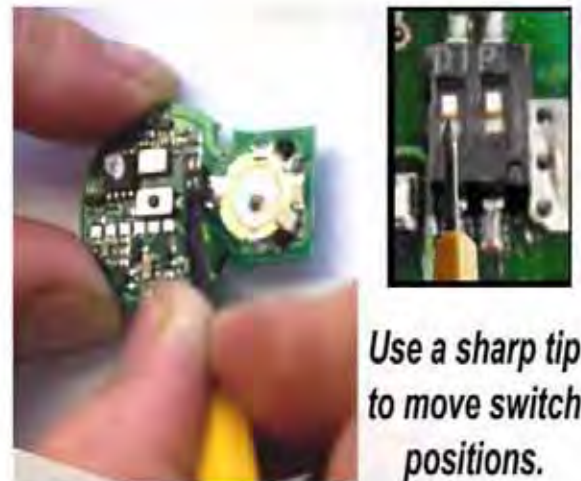
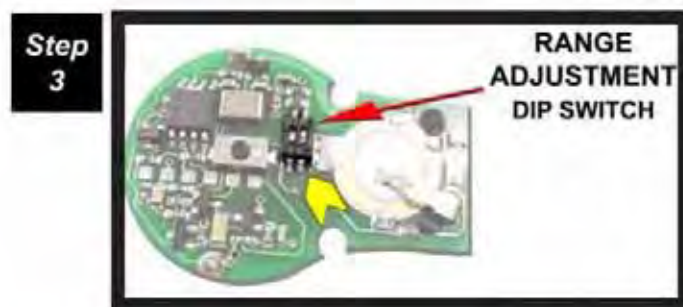


DIGITAL
Guard Dawg™
PERSONAL RECOGNITION SYSTEM

Adjusting Your System Range

The Digital Guard Dawg™ is bench tuned to achieve approximately 10' feet of operating range. Actual system operating range can vary depending on several factors including the amount of metal nearby to the Smart Relay install location.

For this reason, we have provided a way that you can fine tuning the operating range specifically to your bike. Should you desire to **Decrease** or **Increase** the operating range of your Digital Guard Dawg™ system you can do so with the following instructions.



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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 motorcycle must be registered with the State Department of Motor Vehicles.

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"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.