

DIGITAL Guard Dawg™

PERSONAL RECOGNITION SYSTEM™



Owners Manual Installation Guide

Congratulations on your purchase of the new Digital Guard Dawg™ Personal Recognition System. Digital Guard Dawg™ is proudly manufactured 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.

We hope you enjoy a genuine sense of security from owning the Digital Guard Dawg™.

*Many Thanks,
"The Dawg House Gang"*

Getting to know "The Guard Dawg"

Do you ever wish you had your own personal guard dog to protect your motorcycle whenever you weren't there? With the new Digital Guard Dawg™, Personal Recognition System™, Now you do!

"The Guard Dawg" delivers a level of convenience and protection previously unavailable from any other motorcycle security product.

*Simply carry one of the systems' "Dawg Tags™" in a pocket or on your key ring. then, "Just Walk Away" Digital Guard Dawg™ automatically arms and immobilizes your bikes starting system, protecting it from potential thieves. When you return to within 10' feet, Digital Guard Dawg™ recognizes the unique identification code transmitted by your Dawg Tag™ and automatically disarms. **It's just that easy, Your bike only starts when you're there!***

*The Guard Dawg is also very high tech. Through the use of advanced micro-electronic circuitry, Digital Guard Dawg™ interfaces into your motorcycles electrical system by simply replacing the existing starter relay. This revolutionary design provides easy installation without cutting any factory wiring and without taking up any additional space. Since the Guard Dawg looks identical to the original factory relay it replaces, **it's completely invisible to potential thieves!***



"The Dawg House Gang"



"Dawg Tag"™

*RFID (Radio Frequency Identification Device)
Motion Activated - Fully Passive Operation
Over 6 Billion unique codes. Similar to
Personal Recognition Systems found
on Corvette's and Mercedes.*



*The digital "Dawg Tag™" begins
Hands-free communication with the
Smart Relay when the rider approaches
within 10' feet of the motorcycle.*

**No Buttons to push, No Keys to find,
No Codes to try and remember.**

Just get on and ride!

System Components

Your Kit Includes:

- 1 Dawg Tag™
- 1 Smart Relay
(either DGD-1 or DGD-2 as specified)
- 1 "U" Connector for battery wire



RFID - "Dawg Tag"™

Radio Frequency Identification Device

Operates with either DGD-1 or DGD-2 Smart Relays.

Smart Relay's



Pt# DGD - 1

*Full Size
Smart Relay*



Pt# DGD - 2

*1/2 Size "Micro"
Smart Relay*



With over 300 components inside, Digital Guard Dawg's™ revolutionary design uses advanced micro-electronic circuitry to provide a complete security system without cutting any factory wiring and without taking up any additional space.

Tools you may need



"U" Connector

Attaches to relay power wire and motorcycle battery terminal

To remove the seat or side panel of your motorcycle you may need a screwdriver or two. The only actual tools needed for the installation of Digital Guard Dawg™ are a pair of **wire crimper / strippers** to strip and attach the "U" connector and a **box wrench** to connect it to your battery +12 terminal. *Pre- 1995 H-D's & Custom bikes also require a test light to check polarity.*



Getting Started

A few things to do before starting.

1. - Read the installation instructions once through completely before beginning. Being familiar with the system components, their functions and the installation process will speed your actual install.
- 2 - Start your bike and **make sure** it has a good strong battery; an old or weak battery will begin to show difficulty when new electronics are added to your motorcycle.
If your battery is weak, replace or fully charge it before beginning your installation.
3. - Begin with your Ignition switch turned OFF and the key removed.

Relay Fitment

There are 3 different sizes of Harley-Davidson ® Starter Relays



Pt# 31504-91 A / B
or 31506-79 B



Pt# 31579-04



Relay Colors
may vary

Pt# 31522-00 A / B / C,
31511-01 A & 31601-04

DGD - Type 1 Smart Relay

Replaces:

OEM Pt# 31504-91A / B, 31506-79 B
and 31579-04 using adaptor DGD-AD1

WILL FIT:

1999 and older Softail ®
2003 and older Sportster ®
1999 and older Dyna ®
1999 and older Touring ®
2000-2006 Touring ® may be either Type I or II, *Check First*
2004-2006 FLHR / C/S ® are Type I but require adaptor pt# DGD-AD1 ***see page (10)

DGD - Type 2 Smart Relay

Replaces:

OEM Pt# 31522-00 A / B / C,
31511-01 A & 31601-04

WILL FIT:

2000-2006 Softail ® Twin Cams
2004-2006 Sportster ®
2000-2006 Dyna ®
2002-2006 V-Rods ®

Occasionally we have found bikes installed with a different relay than what may be listed in the factory technical manuals, "If the Digital Guard Dawg Relay you received doesn't look like the relay installed in your bike call us direct at 916-337-1040 for assistance.

STEP 1 Locate & Remove the Starter Relay

*If you are installing this product on a 1995 or older Harley® or Custom bike you **MUST** test the relay socket for correct polarity **BEFORE** the Digital Guard Dawg Smart Relay is plugged in. Failure to test could damage system electronics. *** See page 9 of this manual for details on polarity testing.*

The first step in the installation of the Digital Guard Dawg™ system is to locate and remove your bikes existing Starter Relay. **YOUR OWNERS MANUAL WILL TYPICALLY SHOW ITS LOCATION. or if you don't have a manual:** On most H-D® bikes the Starter Relay is in one of three places.

- A. Under the seat - Exposed
- B. Under the seat - Housed inside a electrical box
- C. Behind one of the side covers

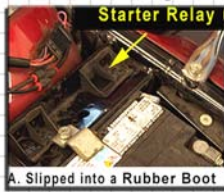
Examples

2002 Sportster®



A. Exposed on a harness

2000 Touring®



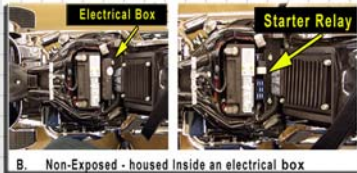
A. Slipped into a Rubber Boot

1998 Softail®



B. Non-Exposed - housed Inside an electrical box

2005 Softail®



B. Non-Exposed - housed Inside an electrical box

2005 Sportster®



C. Behind Side Cover

2006 Dyna®



C. Behind Side Cover

Locate & Remove the Starter Relay

Continued

Visit us on line at

www.digitalguarddawg.com

for more Installation Information

Verifying you have the correct relay

Some newer bikes with additional accessories may have more than one relay under the seat or in their electrical box. These additional relays are used for lights, horn, EFI systems etc. If you have any a doubt as to which relay is the "Starter Relay"

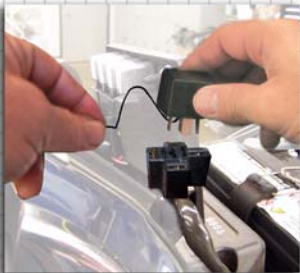
CONFIRM YOU HAVE LOCATED THE CORRECT RELAY WITH THIS SIMPLE TEST:

REMOVE THE RELAY YOU BELIEVE IS THE STARTER RELAY AND TRY TO START YOUR BIKE.

If you have removed the correct Starter Relay, Normal lights will come ON but your motorcycle WILL NOT CRANK. If it Cranks but does not Start you have the Wrong Relay. If the bike still Starts or Cranks, replace the relay and try another until the Starter relay is located.

STEP 2 Installing the Smart Relay

Simply plug the Smart Relay into the socket that you removed the Starter Relay from. * Note that the legs must align in a particular direction to fit correctly. Take care to keep the thin black wire coming from the Smart Relay off to the side and out from under the legs of the relay. Be sure to fully insert the relay tightly into the socket. *** For 2004-2006 FLHS C/S use adaptor DGD-AD1 between relay and socket. To order see page (10)



STEP 3 Attaching the +12 Volt Connector

Next, attach the black wire coming from the Smart Relay to your battery +12 volt (Red) Positive terminal. Before making your connection, find a suitable path to run the wire. Cut the wire to the correct length and strip back $\frac{3}{8}$ inch of insulation, then tightly crimp the "U" connector (provided) on to the bare wire end. Next, attach the "U" connector to your bikes +12 volt positive battery terminal and tighten securely, a poor connection could result making your bike hard to start. **Connecting to any +12 volt terminal, so long as it is direct to battery is also acceptable.**



Final Activation & Testing

Follow the directions below **exactly** as explained to finalize system set up fully test the operation of your new Digital Guard Dawg™ system.

Activate Before Testing

- A-** Turn the bikes ignition Key Switch to OFF.
- B-** Set the Dawg Tag down near the bike and wait a full 3 minutes to allow all components to reset.
- C-** Next, depress the large black button on the face of the "Dawg Tag" until the LED light comes **ON**. Then start your bike as you normally do. **Your bike SHOULD START.**

Next, Proceed to "Final Testing"

****If it doesn't start see "Trouble shooting" section "B"*



Final Testing

- A-** Walk 30' feet + away from your bike and set the "Dawg Tag™" down.
- B-** Wait 30 seconds for the system to arm.
Don't start counting until after you have set the Dawg Tag™ down.
- C-** After 30 seconds has past, without touching the Dawg Tag in anyway, try to start your bike as you normally do. **Your bike SHOULD NOT START.**
Next, turn your key off and remove it. **If it starts see "Trouble shooting" section "C"*
- D-** Finally, walk over and pick up the Dawg Tag. Don't push the buttons, Just give it a slight shake to activate the motion sensor, then walk back to your bike and try to start as you normally would. If everything is correctly installed, **Your bike WILL START!** . . . ***But only because YOU'RE there!***
** If anything doesn't work as described see "Trouble shooting" section "A"*

E- Checking your system's range: Walk 30'+ feet away from your bike with the Dawg Tag™ in your hand, wait 30 seconds then have someone continually depress your start button. Very slowly walk up to your bike, slightly rocking the Dawg Tag side to side. Notice at what range your bike starts. (*typically range is 10' ft. or so*). If after testing you feel you would like to further fine tune your system range up or down, Instructions can be found on the "Installation" page at www.digitalguarddawg.com

OK, Great Job! Now, take a quick read through "Using the System" Then go enjoy yourself knowing anytime you're away from your bike, your loyal friend "The Dawg" is on guard.

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 walk away.

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 Arm³⁰ seconds after your Dawg Tag™ leaves the monitored area around your bike and Disarms 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 set your Dawg Tag™ down on the ground next to your bike and it remained motionless for over two minutes the system will arm even though the Dawg Tag™ is within the monitored area.

Trouble Shooting

A- Since all relays and tags are fully tested prior to shipping, The only variables of installation are: (1) selection of the correct relay, (2) Good connection points from the Relay to Battery (3) Good battery voltage. Review each variable and re-test each step. If you are still having difficulties call Technical Support at (916) 337-1040 / Mon - Sat 9am-5pm pst.

B- If you test started your engine and checked your battery before you began and your motorcycle doesn't start at this point; you have a bad connection at either the Power wire, Connector or the Battery. Go back check your crimp from wire to connector and that your battery connection to is tight. Repeat Pre-Test

C- If your motorcycle starts at this point, Repeat the test one more time and confirm your results, make sure to wait the full 30 seconds after you set the Dawg Tag™ down to allow it time to re-arm. If your bike starts again upon re-testing; you have replaced the wrong relay

CONFIRM YOU HAVE LOCATED THE CORRECT RELAY WITH THIS SIMPLE TEST: REMOVE THE RELAY YOU BELIEVE IS THE STARTER RELAY AND TRY TO START YOUR BIKE. If you have removed the correct Starter Relay, Normal lights will come ON but your motorcycle WILL NOT CRANK. If it Cranks but does not Start you have the Wrong Relay. If the bike still Starts or Cranks, replace the relay and try another until the Starter relay is located.

POLARITY TESTING FOR PRE 1995 HARLEY'S & CUSTOM'S

A. - If you are installing on a Pre 1995 Harley or Custom bike, you should do a quick relay polarity test prior to installing the Digital Guard Dawg™ system. This is important because occasionally some Harley's and Custom bikes have their starter relays wired in reverse of what the relay manufacturer specifies. Damage to the Smart Relay could occur if installed with the polarity reversed. It is an easy process to confirm the polarity of the relay socket on your bike. Simply follow the instructions below:

*** See Diagram (1) - Use a test light to determine which slot of the relay socket receives power when your Start Button is pushed. With the relay socket oriented as shown, turn the Ignition "ON" and depress and hold the "Start" button. Test both slot (1) then slot (2) for power. "Only Slot (1) should have power. If slot (2) indicates power when testing, visit our "Installation" page at www.digitalguarddawg.com or call one of our techs at 916-337-1040 Mon-Sat 8-5 pst. for assistance.

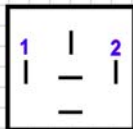
B. - "IGNITION RELAY INSTALL" Some Custom bikes have only an Ignition Relay. If the Digital Guard Dawg™ is used to replace the Ignition Relay, the system will protect the bike just as before but the starter will be able to crank.

C. - Some Custom bikes have NO Relay Socket; On Customs that have the Starter Relay wired with only loose terminals and no Relay Socket whatsoever, pay extra close attention to the way the existing relay is wired as you remove it and be sure to confirm polarity as discussed above. If the polarity is correct, install the Digital Guard Dawg™ Smart Relay in the same manner as the original.

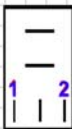
A generic "Hard Wire" wiring diagram for any bike can be found on the "Installation" page of www.digitalguarddawg.com

Relay Socket Polarity Diagram 1

Type 1
Relay Socket



Type 2
Relay Socket



Got a Question?

Call one of our techs at

916-337-1040

Mon-Sat 8-5 pst.

for assistance.

Test the socket not the relay

Switching from "Automatic" Mode to "Manual" Mode

Automatic Mode (Passive)

Press and hold down both buttons on the Dawg Tag until the LED goes out. (approximately 5 seconds) After the LED light goes out, the Dawg Tag will flash 5 times to acknowledge the system is in AUTOMATIC mode.

Manual Mode - Press and hold down both buttons on the Dawg Tag until the LED goes out. (approximately 5 seconds) After the LED light goes out, press the large BLACK button 2 times consecutively, after pressing the BLACK button two times. The Dawg Tag will flash 3 times to indicate you are in MANUAL mode

The Dawg tag can be toggled from manual 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 and store your spare Dawg Tag in Manual mode, This will extend

Replacing the Batteries in your "Dawg Tag"

STEP 1

Remove the screw located on the back of your "Dawg Tag" to separate the two halves of the DAWG TAG.



STEP 2

Remove the circuit board with the batteries installed from the plastic housing.



Take note that the two batteries are installed with the NEGATIVE sides positioned outward from each other when inserted.

STEP 3

Remove batteries from the circuit board and replace with 2 CR2032 Lithium Disc batteries.



Once batteries are installed, go ahead and put "Dawg Tag" back together.





DIGITAL Guard Dawg INC.

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DGD-AD1 adaptors for **2004-2006 FLHR/C/S** Installations can be ordered at www.digitalguarddawg.com or by calling 916-337-1040 Mon-Sat 9-5 pst.

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.

DIGITAL
Guard DawgTM
PERSONAL RECOGNITION SYSTEM



Save over 50%
off a 2nd Dawg TagTM
Just for giving us your comments.

We place a high value on the feedback we receive from riders actually using the Digital Guard DawgTM system. This type of information helped create this product and keeps us focused on how we can improve. So if you're willing to do a little something for us, we would like to do something nice for you.

*Just visit our website and complete a short customer survey. (Takes only about 2 minutes) and we will send you an 2nd Dawg TagTM for your system for only **\$24.49** ^{+S&H}*

Retail Price \$49.00

Promotional Code:
DGD-0379

To take us up on this special offer just log on to: www.digitalguarddawg.com/feedback or if you prefer, you can call us at 916-337-1040 and complete your survey by phone.

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916-337-1040