Installation Guide and User Manual

A quick look at inView®, inView Plus® and inView®2

Congratulations! You now own one of the most significant advances in motorcycle safety. Studies from around the globe prove what we already know - motorcyclists get hit because they are not seen. inView® was designed to improve your visibility by placing a brake and turn signal light where it is most visible – high and center. inView® is the smartest way to be seen! With a rich feature set, once installed, inView® requires almost no user intervention. inView® is so advanced, Motorcycle Consumer News (MCN) awarded it (across all three performance categories) 5/5 stars – a perfect score and was awarded the best safety product at the AIMExpo.

Third Eye Design's inView® wireless helmet brake and turn signal light system is so advanced it is internationally trademarked and patented.

PLEASE READ BEFORE INSTALLING: Third Eye Design products should be installed by a qualified, experienced motorcycle technician. If you are unsure of your ability to properly install a product, please have the product installed by your local motorcycle dealer. Third Eye Design takes no responsibility for damage caused by improper installation.

(3) Alcohol prep pads
(1) Helmet Light
(1) Double-sided mounting tape (to attach accessory brake light)

Installation Overview

These instructions are written to help guide you in installing the inView® brake and turn signal system. There are three parts to these instructions:

I. Part one (I) explains how to install the wireless sending unit onto the motorcycle (transceiver unit).
II. Part two (II) explains how to install the accessory brake light onto the motorcycle
III. Part three (III) explains how to affix the wireless brake and turn signal LED assembly (receiver unit) onto the helmet.

> **IMPORTANT:** Once installed, please update **both** the motorcycle and helmet units with inView® Brake & Signal Light iOS or Android inView® application. Application instructions can be found on our support page: https://thirdeyedesigninc.com/support/

Installation Precaution Notice - Please read the following instructions thoroughly before installing the motorcycle transceiver and helmet receiver units.

NOTE: If at any time during the installation process you feel uncomfortable in performing the tasks documented in these instructions, please consult an authorized motorcycle service center in your area for help.

I. Part One: Mounting and Connecting the Motorcycle Transceiver Unit

Required Components:

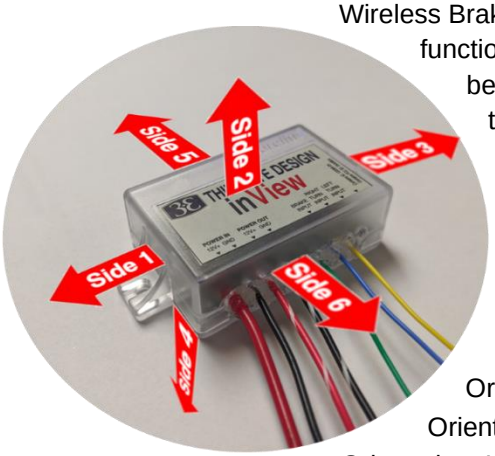
(1) Transceiver unit
(4) Posi-Tap™ connectors
(1) 3M Double-sided foam mounting tape
(1) Alcohol prep pad

Wiring diagrams and schematics as needed

Required tools to access your motorcycle battery, mounting location, and electrical components

Before beginning the installation, take a look at the small motorcycle transceiver box that has the seven wires coming out of it. Locate space on the motorcycle that is large enough to safely house this box and its wires. The location must be positioned where the unit is protected from physical harm. While the unit is resistant to moisture, it should be located in a place where it is not exposed to water or excessive heat. Also consider that it is best if the location is not obscured by large metal surfaces which can interfere with signal transmission. Please note that inView® is fully CAN-Bus compatible.

Installing your motorcycle transceiver for most effective engine braking functionality In order for your inView® Wireless Brake and Turn Signal System to provide the best (optional) passive braking functionality, the unit must be installed securely on the motorcycle and the orientation must be set using the iOS or Android application. The motorcycle unit must be installed such that one of the 6 orientations below is facing the direction of travel. For example, if you select Side 2 below, the side with the inView® sticker faces toward the front of the bike. It needs to face directly forward. Any tilt or deviation other than directly forward will diminish the functionality of passive braking.



Please note the following orientation considerations:

Orientation 1: Wires down is most effective. Wires up is least effective.

Orientation 2: Wires down is most effective. Wires up is least effective.

Orientation 3: Wires down is most effective. Wires up is least effective.

Orientation 4: Wires down is most effective. Wires up is least effective.

Orientation 5: inView® label up is most effective. Label down is least effective.

Orientation 6: inView® label up is most effective. Label down is least effective.

Note: See iOS / Android instructions for turning on beta passive deceleration functionality

Wiring Instruction for the Motorcycle Transceiver Unit

When wiring the motorcycle transceiver please remember to always test all the functions of the transceiver and ensure that the helmet lights function properly before cutting the wire leads to length and securing the transceiver to the motorcycle.

Find a safe, secure, and dry place to mount the transceiver box. We recommend mounting it under the seat or in the tail section if available. The clear translucent cover will allow you to see the power LED inside the case that tell you that you have made a proper connection. Virtual LEDs in the Setup Motorcycle section of the iOS/Android app to indicate proper turn signal and brake functionality are in the inView® iOS and Android app.

1. Lay out the inView® transceiver the way it will be installed onto your motorcycle. Review wire connections in steps 4-6 and make sure the wires are routed in such a way that they will not be pinched, cut, or exposed to direct heat or moving parts. If a power wire is pinched, it could cause the transceiver to malfunction.
2. Once the transceiver and wires are staged, clean the proposed transceiver mounting surface with an alcohol prep pad (included). The mounting surface should be between 45- and 85-degrees Fahrenheit to achieve the strongest bonding results from the double-sided adhesive.

   Note: The surface area must be free of all oils, moisture, dirt, and wax for the supplied adhesive tape to bond and adhere to the installation surface correctly. Mount the transceiver to your selected location with the double-sided 3M foam tape.

3. Next, locate the wire marked POWER IN GND on the transceiver and attach it to ground, typically a bolt that fastens to the motorcycle's frame**. Note*: Use caution that you do not pick a metal surface that is electrically insulated by plastic or rubber bushings.***

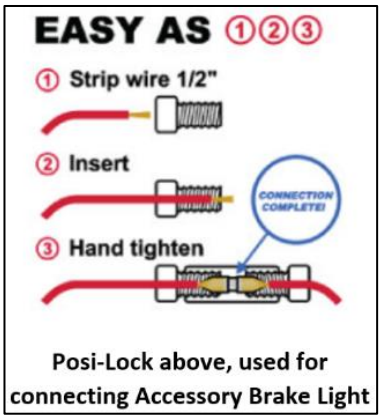
(The following steps require the use of Posi-Tap and Posi-Lock connecters per diagram below see detailed instructions here: https://www.posi-products.com/instructions1.html)

4. Find the motorcycle transceiver wire labeled "brake input" and attach it to the motorcycle wire that provides signal when the brake is engaged, and the brake light is illuminated. ***Do not confuse the brake wire with the taillight running light wire (which is always on when the motorcycle is running).***
5. Using the enclosed Posi-Tap™ connector, attach the wire labeled "right turn" to the motorcycle wire leading to the right turn signal that is "hot" (on) only when the right turn signal is engaged and blinking.

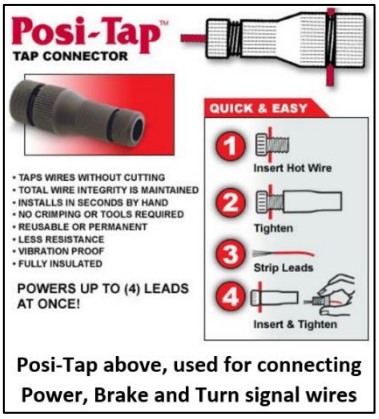
***Please note**: Some motorcycles have combination brake and turn signals (eg. Harley Davidson Street Glide and Road Glide) where the same taillight that is used for a turn signal is also used for a brake light. The* inView® *motorcycle transceiver must have a connection to a single input source. If this is the case, connection to the rear brake light and front turn signals typically works.*

The input wire cannot serve both as a brake and turn signal. If this is the case, you may need to pick up turn signal input from the front turn signals.

Note: *The* inView® *motorcycle transceiver must have a connection to an unmodulated brake signal input*. If your motorcycle has a modulated brake light, you must connect inView® ***BEFORE*** *the brake light is modulated.*



Posi-Lock above, used for connecting Accessory Brake Light



Posi-Tap above, used for connecting Power, Brake and Turn signal wires

6. Repeat step 4 above for the left turn signal.
7. Last, connect the power wire labeled *12V + IN* directly to a switched wire that is "hot" (on) when the motorcycle is on. Generally, good sources of power are switched accessory power outlets. Please consult your motorcycle manual or electrical diagram.

Note: inView® must be connected to ignition-on power and **not directly to the battery or an always-on power source.**

8. Once the wire is connected, turn your ignition key on and check to make sure the inView® power LED is illuminated when the motorcycle is on.

Note: Once the motorcycle unit is powered, you can connect to the iOS or Android app and test proper connectivity. See application instructions on our support page. Once the MC unit is powered on, connect to the iOS or Android app and connect to inView® Motorcycle. Once connected, go to Setup Motorcycle from the main menu. There, you will see a virtual LED illuminate to indicate a proper power/ground connection. A virtual LED will illuminate each time a signal is seen from a directional or brake. When the unit initially powers on, it will perform self-diagnostics and all MC unit LEDs will flash).

9. Test to make sure that each motorcycle transceiver LED glows when brake, left directional and right directional are activated. The power LED should remain on whenever the unit is connected, and power is supplied.
10. Make sure you have proper clearances before reinstalling any covers or seats. Replace any parts of the motorcycle that were removed.

> **Installation Tip:** If any of the wires need to be extended, be sure to use equivalent gauge or heavier automotive grade wire. If you are running wire and must go through the frame or any other metal parts, make sure to protect the wire by using a grommet or electrical tape.

II. Part Two: Mounting and Connecting the Accessory Brake Light

Required Components:

- (1) Accessory brake light
- (1) Double sided mounting tape
- (1) Alcohol prep pad
- (2) Posi-LockTM connectors
- Required tools to run the accessory brake light wires to the motorcycle transceiver box.

NOTE: This an important step! With inView®'s engine braking feature, it is important to have a physical motorcycle brake light that comes on with the inView® helmet light to ensure following motorists see the relationship between the inView® helmet light and a brake light. This is the only DOT recommended way to provide passive braking signaling!

Before beginning the installation, look at the accessory brake light included with the inView® system. This light is mounted with the included 3M™ double-sided tape. From the back of the motorcycle, locate a suitable flat area, close to the motorcycle taillight, parallel to the ground to mount the light. The best locations are typically above or below the existing taillight. Once mounted, the light must face directly backwards and should not be angled up or down. The accessory brake light functions when the inView® motorcycle transceiver senses deceleration and sends a signal simultaneously to the accessory brake light *and* helmet light. This ensures following motorists see (and understand) the relationship between the helmet light and the motorcycle accessory brake light.

1. After identifying a suitable location, determine a clear path to route the wires to connect them to the 12V Power Out wires from the transceiver unit installed in the motorcycle.
2. Connect the accessory brake light to the motorcycle transceiver's 12V Power Out wires using the Posi-Lock™ connectors.
3. Secure the wires with tie-wraps or electrical tape as necessary.

III. Part Three: Mounting the Helmet Receiver Unit

Required Components:

- (1) Helmet brake and signal light
- (1) 3M Dual-lock™ mounting tape
- (2) batteries
- (1) Alcohol pad

Instructions for Installing the Helmet Receiver Unit

Note: Installation of the helmet receiver unit is only for those helmets whose outer shell is a hard polycarbonate or similar material.

1. Install the batteries by removing the 2 screws on the back of the helmet receiver unit and carefully pull the base away from the lens assembly.

   Please note: **Be sure to install the batteries with correct polarity (as indicated).** *Do not overtighten the screws! Just 3 inch-pounds of force (a gentle, finger tight) is necessary to tighten the back.*

2. Locate one of the 3M Dual-lock™ oval helmet-mounts. With the adhesive side out and the adhesive protective tape in place, pinch the helmet mount oval to the back of the helmet receiver's pre-installed 3M Dual-lock™ so that you have the helmet mount attached to the inView helmet unit.
3. Locate the area on the back of the helmet where you wish to install the helmet receiver base. The area should be smooth and clean. Without removing the protective tape to expose the adhesive, align the helmet receiver in the best location on the back of the helmet. When wearing the helmet in a normal riding position, the helmet receiver unit should point straight back. Test the area to ensure that the Dual-lock™ tape coin makes good contact and the flexible skirt fills the gap as best as possible. This is a good time to have someone help you pick the best spot on the helmet – it may be higher than you think. Please test the unit to ensure the turn signals are correctly oriented!

   Installation Tip:
   - The helmet receiver must be applied so that the logo and writing on the base is right-side up. **NOTE: If installed upside down, it will beep and flash continuously, when it initially connects to the motorcycle to indicate that it is upside down.** This test only occurs when it initially connects to the motorcycle. *Be careful not to remove and reinstall the helmet unit while the motorcycle is running since the test will not be performed until the MC unit turns off and reconnects to the helmet unit the next time it is started. If installed upside down the beeping and flashing will stop once corrected and the helmet receiver will return to normal operation.*
   - The 3M Dual-lock™ tape should be applied directly to the helmet surface and not over decals or vents. The helmet and tape must be at room temperature. Once you have the area selected, use masking tape to mark reference points where the top, bottom and sides of the base will be on the helmet. This will help you properly align and attach the base.

4. Use an alcohol pad (included) to clean the mounting area on the helmet.
5. Remove the protective tape from the Dual-Lock™ pads on the helmet receiver base to expose the adhesive. Be careful not to touch the adhesive with your fingers, and ensure it is not contaminated in any way prior to attachment to your helmet.
6. Carefully align the base to the tape markings you made (see second bullet under "Installation Tip" above) and affix the base to the helmet.

   Important: *Do not attempt to remove the pads or reposition the unit for at least 3 hours after mounting on the helmet. This allows time for the adhesive to bond correctly (note: the adhesive reaches its **full** bonding strength 48 hours after application). Once the tape has cured, you may carefully tilt the helmet receiver unit up or down to separate it from the helmet, reposition it, or to install it on a passenger helmet with the (supplied) extra Dual-lock™ disk.*

Installation Tip: The helmet receiver unit has a tested range of approximately 10-20 feet. If it seems that you do not have consistent functionality when in a riding position, then the transceiver unit attached to the motorcycle

may be blocked or affected by its location. Try relocating the transceiver unit or repositioning it to increase antenna gain.

Android / iOS Application :

Please search for inView® Brake in the appropriate app store and download the inView® app. This is where you will manage your inView® system and keep the firmware up to date. See separate instructions at thirdeyedesigninc.com/support/.

Indian Motorcycle Configuration: Please note – Indian Motorcycle owners require a separate step under "Setup Motorcycle" in the smartphone app – see Android and iOS Application Guide for details.

General use and care:

Operation: inView® was designed as a "*set and forget"* device that requires minimal user intervention. Once connected, a double chirp and vibration will let you know the unit is functioning properly. When the unit disconnects (or goes back to sleep) the unit will alert you with a single chirp and vibration. The helmet unit should be visually inspected prior to each ride to insure it is installed correctly and working properly.

Each time the helmet unit connects to the motorcycle transceiver, the helmet unit will perform a test to make sure it is installed correctly (not upside down) and working properly. If the helmet unit is installed upside down, it will flash and chirp repeatedly until it is correctly oriented. This test only occurs once each time it connects to the motorcycle. Note: *Be careful not to remove and reinstall the helmet unit while the motorcycle is running since the test will not be performed until the unit reconnects to the motorcycle the next time it is started.* If you see the brake lights flashing it means your batteries are getting low.

Battery Installation: When changing the batteries, please make sure the motorcycle is turned off and not connected to the helmet unit. While the back is off, avoid exposure to dust, moisture or other contaminants. Do not overtighten the screws! Just 3 inch-pounds of force (a gentle, finger tight) is necessary to tighten the back against the skirt gasket.

Performance tip: inView® was designed for use with LI (lithium-ion) batteries which offer better power characteristics and, as an added benefit, are lighter weight.

FCC Statement:
This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions. (1) This device may not cause harmful interference. (2) This device must accept any interference received, including interference that may cause undesired operation.
IC Statement:
This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le onctionnement.