

# inView

## Third Eye inView™ UAT (User Acceptance Test) Installation Guide and User Manual

### A quick look at Third Eye inView™



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. **Third Eye inView™** was designed to improve your visibility by placing a brake and turn signal light where it is most visible – high and center. Two patents provide a rich feature set and once installed, **Third Eye inView™** requires almost no user intervention.

Key features include:

Brake, Turn Signal and Hazard light functionality

- Technology so efficient it doesn't need an on/off switch
- Automatic diagnostics that test function, LEDs and battery life
- Integration with the motorcycle braking and directional systems for consistent signaling
- Deceleration (down shifting) illuminates helmet light and accessory tail light
- Ultra-bright LEDs – for daytime visibility
- Long battery life - utilizes common Lithium-ion AAA, easily replaced batteries
- Easily transferred between helmets
- Simple, do-it-yourself installation

Third Eye Design was founded on the belief that we can make this world a better, safer place – thanks for helping us do this, one motorcycle at a time!

The Third Eye inView™ wireless helmet brake and turn signal light system is patent pending in the United States and worldwide.”

## Package Contents

- (1) Transceiver unit
- (1) Receiver unit
- (4) Posi-tap™ connectors (left directional, right directional, brake, ignition-on)
- (2) Dual-Lock™ connectors (to attach the helmet brake and signal light)
- (6) 3M Dual-lock™ fastener disks (to attach the helmet receiver unit)
- (1) 3M Double-coated foam tape (to attach the motorcycle transceiver unit)
- (1) 3M Double-coated foam tape (to attach the accessory brake light)
- (2) AAA batteries
- (3) Alcohol prep pads
- (1) Accessory brake light
- (2) Fuse™

## Installation Instructions

### Installation Overview

These instructions are written to help guide you in installing the Third Eye 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.

### Installation Precaution Notice

Please read the following instructions thoroughly before installing the motorcycle transceiver and helmet receiver units.

**NOTE: These instructions are written for a person who has a good understanding of motorcycle maintenance - both electrical and mechanical.**

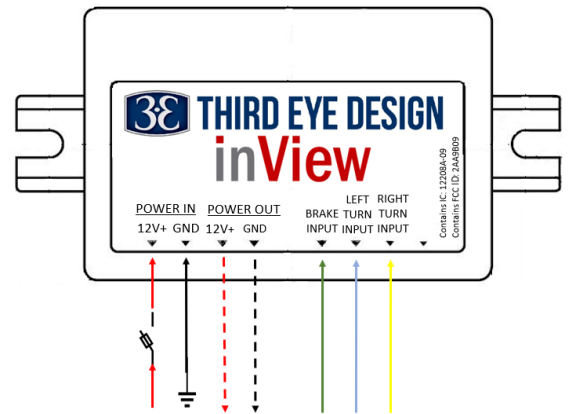
You must be comfortable in removing a seat, service covers or other motorcycle parts to expose your motorcycle's wiring. Additionally, you must have a good understanding of your motorcycle's wiring so you can locate the brake wire, right and left turn signal wires, and the power and ground wires.

***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
- (3) Posi-tap connectors
- (1) Alcohol prep pad
- Required tools to access your motorcycle battery, mounting location and electrical components
- Wiring diagrams and schematics as needed (many are located here: <http://www.classiccycles.org/>)



Before beginning the installation, take a look at the small motorcycle transceiver box that has the seven colored 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.

### 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.

**Note:** The wiring taps (see Quick & Easy usage diagram below) supplied with your unit can be easily moved and reused until you are satisfied with your installation.

1. 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 and signal LEDs inside the case that tell you that you have made a proper connection.
2. Lay out the Third Eye 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.
3. 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.

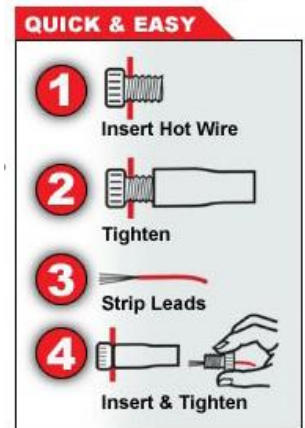
**Note:** The surface area must be free of all oils, moisture, dirt and wax in order for the supplied adhesive tape to bond and adhere to the installation surface correctly. Mount the transceiver to your selected location with the foam tape.

4. Next, locate the wire marked negative (-) 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 connectors per diagram at right)*

**Note:** For the following steps, an LED will illuminate in the motorcycle transceiver to indicate a proper power/ground connection and each time a signal is seen from a directional or brake (you will see the LEDs illuminate through the clear cover. When the unit initially powers on, it will perform self-diagnostics and all LEDs will illuminate).

5. Find the motorcycle transmitter 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 tail light running light wire (which is always on when the motorcycle is running).***
6. Next, 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.
7. Repeat step 6 above for the left turn signal.
8. 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. If such a wire is not readily available, you can connect directly to the positive terminal on the battery. Once the wire is connected, install the supplied fuse and check to make sure the power LED is illuminated when the motorcycle is on.
9. Test to make sure that each transmitter 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) Scotch 3M™ double sided mounting tape
- (1) Alcohol prep pad
- (2) Posi-connect connectors
- Required tools to run the accessory brake light wires to the transmitter box.

Before beginning the installation, take a look at the accessory brake light included with the Third Eye inView™ system. This light is mounted with the enclosed 3M™ double-sided tape. From the back of the motorcycle, locate a suitable flat area, close to the motorcycle tail light, parallel to the ground to mount the light. The best locations are typically above or below the existing tail light. Once mounted, the light must face directly backwards and should not be angled up or down. The accessory brake light functions when the Third Eye inView™ transmitter senses deceleration and sends a signal simultaneously to the accessory brake light *and* helmet light. This insures 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 Dual-Lock™ connectors pre-attached to the motorcycle transceiver.
3. Secure the wires with the enclosed tie-wraps or electrical tape as necessary.

### III. Part Three: Mounting the Helmet Receiver Unit

#### Required Components:

- (1) Helmet mounting base
- (1) 3M Dual-lock™ mounting tape
- (1) Helmet LED enclosure
- (2) AAA 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 shell.**

1. Install the batteries by removing the 2 screws on the base of the helmet receiver unit and carefully pull the base and skirt away from the lens assembly. *Please note, the screws are O-ring sealed; do not lose the O-rings as they are required to ensure a water-resistant seal.*

**NOTE: Be sure to install the batteries as indicated.**

2. Locate one of the 3M Dual-lock™ tape coins. With the adhesive side out and the protective tape in place, pinch the coin to the back of the helmet receiver so that you have (2) pair of coins connected by the Dual-lock™ fastener.
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.

#### Installation Tip:

- The helmet receiver must be applied so that the logo and writing on the base is right-side up.
  - 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 actually 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™ coin.

**Installation Tip:** The helmet receiver unit has a tested range of approximately 10 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.

**Congratulations! You are on your way to increased visibility and safer riding!**

#### General use and care:

Third Eye inView™ was designed as a set and forget device that requires minimal user intervention.

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

Once installed, a chirp and vibration upon wake after sleep will let you know the unit is functioning properly. When the unit disconnects (or goes back to sleep) the unit will alert you with the same chirp and vibration.

You should not need to change the batteries during the pilot period. If the need arises, please call customer service.

#### Troubleshooting:

If for any reason the unit does not perform properly. Please contact 833-847-3393 extension 5 for assistance.



**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 fonctionnement.