## Installation Manual



## Introduction

The Axon Signal Unit (ASU) is part of a communications platform that interacts with an emergency vehicle's light bar. When the light bar activates, all properly equipped Axon Flex systems within range begin recording.

For automatic recording to occur, an Axon Flex camera must be attached to an Axon Flex controller equipped with Axon Signal technology. A controller equipped with this technology has an Axon logo on the lower-left side of the front of the device. See the *TASER Axon Flex System User Manual* for more information.





Axon Signal Unit

Axon Flex controller with Axon Signal technology

Failure to follow the instructions in this manual may result in the ASU not working properly or cause damage to the ASU or the vehicle. Save these instructions.

The technician who installs the ASU must be qualified to work with automotive electronics.

When installing the ASU, ensure that drilling will not damage the emergency vehicle's equipment or surface. Remove all burrs and debris after drilling.

Ensure there is a good electrical ground to the vehicle chassis.

Do not install the ASU anywhere that will interfere with airbag deployment.

Do not install the ASU where it will be exposed to the elements or extreme heat. Do not install the ASU in the vehicle's engine compartment.

#### **Characteristics**

Secure Bluetooth broadcast (30 seconds).

Activates all enabled cameras in range (30+ feet/9.1+ meters).



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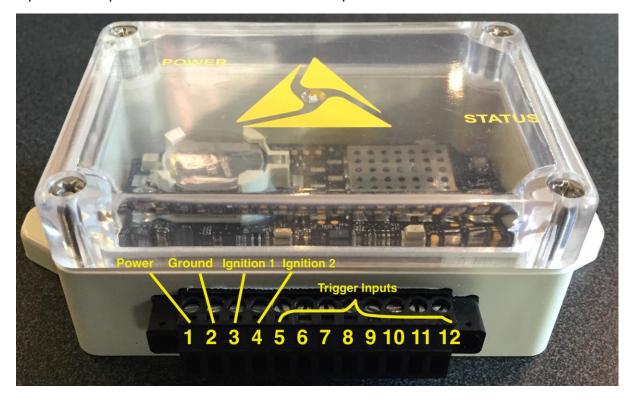
The ASU only causes an Axon Flex system to transition from BUFFERING to EVENT mode. You end the recording with a 3-second press of the EVENT button on the Axon Flex controller.

Double-pressing the EVENT button on the Axon Flex controller after the EVENT mode is activated by the Axon Signal Unit will not interfere with recording.

## **Installation Instructions**

- Axon Signal Units are usually installed near the siren box or light bar controller (trunk or console).
- Clean the surface before installation.
- The ASU can be mounted using robust double-sided tape, Velcro, or bolting tools (bolts not included).
- Wires should be connected to the GPIO terminal block interface.
- Wires should be no smaller than 18 gauge.
- 1A fuse is recommended, either in line or on a fuse block.
- No programming of the box is required, just installation.

Inputs and respective locations are outlined in the picture below.

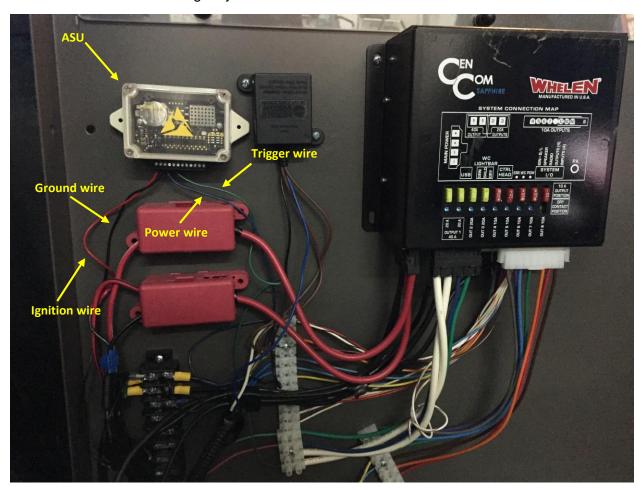




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An ASU installed in an emergency vehicle.



The most important things to installing your Axon Signal Unit are:

- Locating the vehicle electronics.
- Identifying the trigger (for an ASU installation, this would be the light bar), power, and ignition wires.
- Connecting the ASU to ground.

## **Step 1: Locate the Electronics**

The first step to installing the Axon Signal system is locating the wiring for your vehicle. Generally, the wiring is found in the trunk, up against the back of the rear seat, in the console under your light bar controller, or in a box designated specifically for electronics (mostly for motorbikes).

## Step 2: Locate the Trigger Wiring

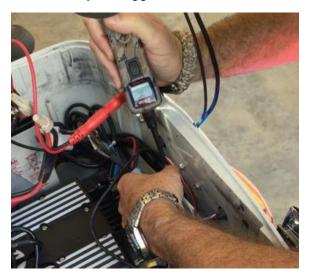
Once you have located the electronics you must determine which wire is connecting to the trigger that will activate your Axon products. To identify the correct wire:

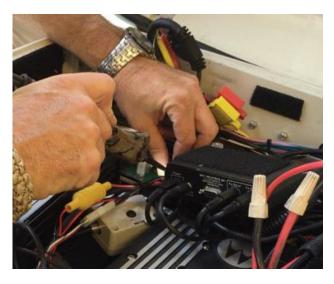


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- 1. Turn on the trigger (that is, turn on the light bar).
- Use a voltmeter to test the wires that might be connected to the trigger.When you make contact with the correct wire, the voltmeter will indicate its activity.
- 3. Turn the trigger off and verify that the voltage drops to zero; then you know you have located your trigger wire.





**Step 3: Locate Power and Ignition Wiring** 

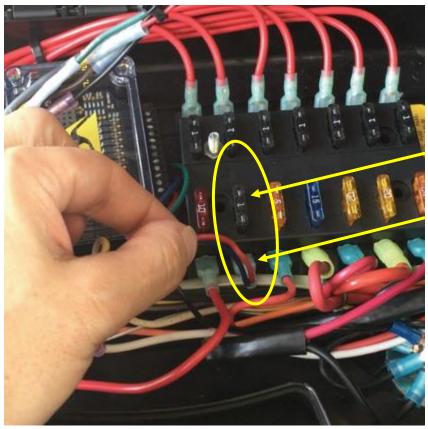
After locating and connecting the trigger wire, you must do the same for the power and ignition. Often, the vehicle's battery will be hooked up to a timed relay. If it is, you may run power and ignition wires into the same position and place a 1-ampere fuse in line.

**Note:** Both power and ignition inputs on the Axon Signal Unit must be used for the device to work properly. In some cases (e.g., when you are using a timed relay), the inputs come from the same source. Standard setup, you need to identify both power (hot) and ignition.



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1 Amp fuse

Power and ignition

**Step 4: Run the Ground Wire to the Ground Position** 

Finally, you will need to connect the Axon Signal Unit to ground.

- 1. Locate the ground wire.
- 2. Connect it to a grounded location in the electronics area.



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Step 5: Verify the Axon Signal Unit Is Working

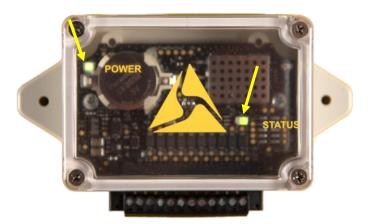
It is recommended that you test your signal unit to make sure it is functional.

- 1. Start the vehicle's engine.
- 2. Look at the ASU.
  - A green POWER light indicates the ASU is powered up.
  - A green STATUS light indicates a successful startup.
    - o If both lights are on, your ASU is ready and working properly.
    - If either light is not on, try turning the engine off and restarting it. If both lights do not turn on, remove the power wire from slot 1 and plug it back in. If either light remains off, contact TASER customer service.



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- 3. Turn on the trigger (for example, turn on your vehicle's light bar).
- 4. Listen for the two beeps that indicate your Axon Flex system now is in EVENT mode.

## **Troubleshooting**

If you finish the installation and the power and status lights do not turn on, the vehicle's breaker switch might not be turned on. Flip the breaker switch and repeat the instructions in *Step 5: Verify the Axon Signal Unit Is Working.* 

If this does not work, there may be an issue with the wiring.

### **Radio Waves**



Changes or modifications to the equipment not expressly approved by the manufacturer could void the product warranty and the user's authority to operate the equipment.

Your wireless device is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to ensure the safety of all persons, regardless of age and health. Before a device model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable



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protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult TASER International Customer Service for help.

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, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

To comply with FCC RF exposure limits for general population / uncontrolled exposure, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

#### Section 7.1.3 of RSS-GEN

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.

### Section 7.1.3 de RSS-GEN

Cet appareil est conforme aux normes d'exemption de licence RSS d'Industrie Canada. Son utilisation est soumise aux conditions suivantes : 1) cet appareil ne doit pas causer de brouillage, et 2) doit accepter tout brouillage, y compris le brouillage pouvant entraîner un fonctionnement indésirable.

#### Section 7.1.2 of RSS-GEN

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.



## **Installation Manual**



To comply with IC RF exposure limits for general population / uncontrolled exposure, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

#### Section 7.1.2 de RSS-GEN

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio ne peut fonctionner qu'au moyen d'une antenne d'un seul type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique pour les autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas celle requise pour établir une communication satisfaisante.

Pour se conformer aux limites d'exposition aux radiofréquences fixées par Industrie Canada relativement aux limites d'exposition humaine, l'antenne utilisée pour cet émetteur doit être installée à une distance d'au moins 20 cm de toutes les personnes et ne doit pas être installée ou exploitée conjointement avec d'autres antennes ou émetteurs.

RSS 210 Warning Statement: The installer of this equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Heath Canada's Web site <a href="www.hc-sc.gc.ca/rpb">www.hc-sc.gc.ca/rpb</a>.

Bluetooth is a trademark of the Bluetooth SIG, Inc., and Velcro is a trademark of Velcro Industries B.V.

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