



TB-100 Bluetooth Transmitter Installation Guide

version 1.0

Bluetooth Transmitter Installation Guide

The Bluetooth Transmitter is a device that can be added to new and existing Flashback systems (including Flashback2, Flashback3, and FlashbackHD) to enable bi-directional record triggering between Flashback system(s) and BWX-100 body worn camera(s).

Bluetooth Transmitter Kit

The Bluetooth Transmitter Kit includes:

- ZAS-TM010001—Transmitter module model TB-100—Qty: 1
- ZAN-001-0001—Antenna—Qty: 1
- ZCA-C22021-6—Cable, antenna—Qty: 1
- ZMC-TM010002—Bracket, antenna mounting—Qty: 1
- HDW-90064A330—Screw, #8 x 1/2 lg, hex head, sheetmetal, drill point, steel—Qty: 4
- HWD-90190A148—Screw, #6 x 1/2 lg, pan head, sheetmetal, steel—Qty: 2
- ZCA-TM010001—Cable assembly, signal and power—Qty: 1
- **ZCA-TM010002—Cable assembly, Flashback pigtail—Qty: 1 (Flashback version only)**
- 2 x ZCA-TM010003—Cable assembly, Fuse Holder, 2A—Qty: 1
- 2 x CO-159-1622—Butt Splice, 22-16 AWg—Qty: 1



If you are using this Bluetooth Transmitter with a Flashback in-car video system, see “Flashback Version” on the next page.

If you are using this Bluetooth Transmitter with Body Worn cameras only, see “Emergency Lights or Siren Activated Version” on page 5.

Flashback Version

1 Mount the transmitter box

Begin by selecting a location that is:

- On a flat surface in the trunk or cabin
- Within 4 feet of the antenna and 10 feet of the Flashback DVR, and
- Away from possible spills.

Next, mount the transmitter box (ZAS-T M010001) to the surface using the self-tapping screws.

2 Mount the antenna

Begin by selecting a location that is within 4 feet of the Bluetooth Transmitter, such as on the vehicle's back deck, cage wall, or A-pillar. Next, mount the antenna (ZAN-001-0001) using the provided bracket hardware (ZMC-TM010002).

3 Connect the antenna cable (ZCA-C22021-6) to the antenna (ZAN-001-0001).

4 Connect the other end of the antenna cable (ZCA-C22021-6) to the Bluetooth Transmitter.

5 Plug the Signal & Power cable (ZCA-TM010001) into the POWER/SIGNAL port on the back of the Bluetooth Transmitter.

6 Make the wiring connections:

Wire	Color	Connect to...
FB REC LED	Orange	Orange wire on Flashback Pigtail cable
GROUND	Black	Same ground location as Flashback
12V BATTERY	Red	To 2-amp fuse, then to battery positive
IGNITION	White	To 2-amp fuse, then to white wire on Flashback Pigtail cable
TRIGGER OUT	Gray	To the brown Aux 1 wire or gray Aux 2 wire

7 Connect the Flashback Pigtail cable (ZCA-TM010002) to the white lead on the back of the Flashback monitor cable.

8 Configure the Flashback to support remote triggering:

- a. Login to your DES video management software as an Admin user.
- b. Open the DVR record for the Flashback that will be connected to this **Bluetooth Transmitter**.
- c. Click the **Triggers/Display** tab.
- d. Select the *Aux 1* or *Aux 2* checkbox to indicate which Flashback connection you used for TRIGGER OUT.

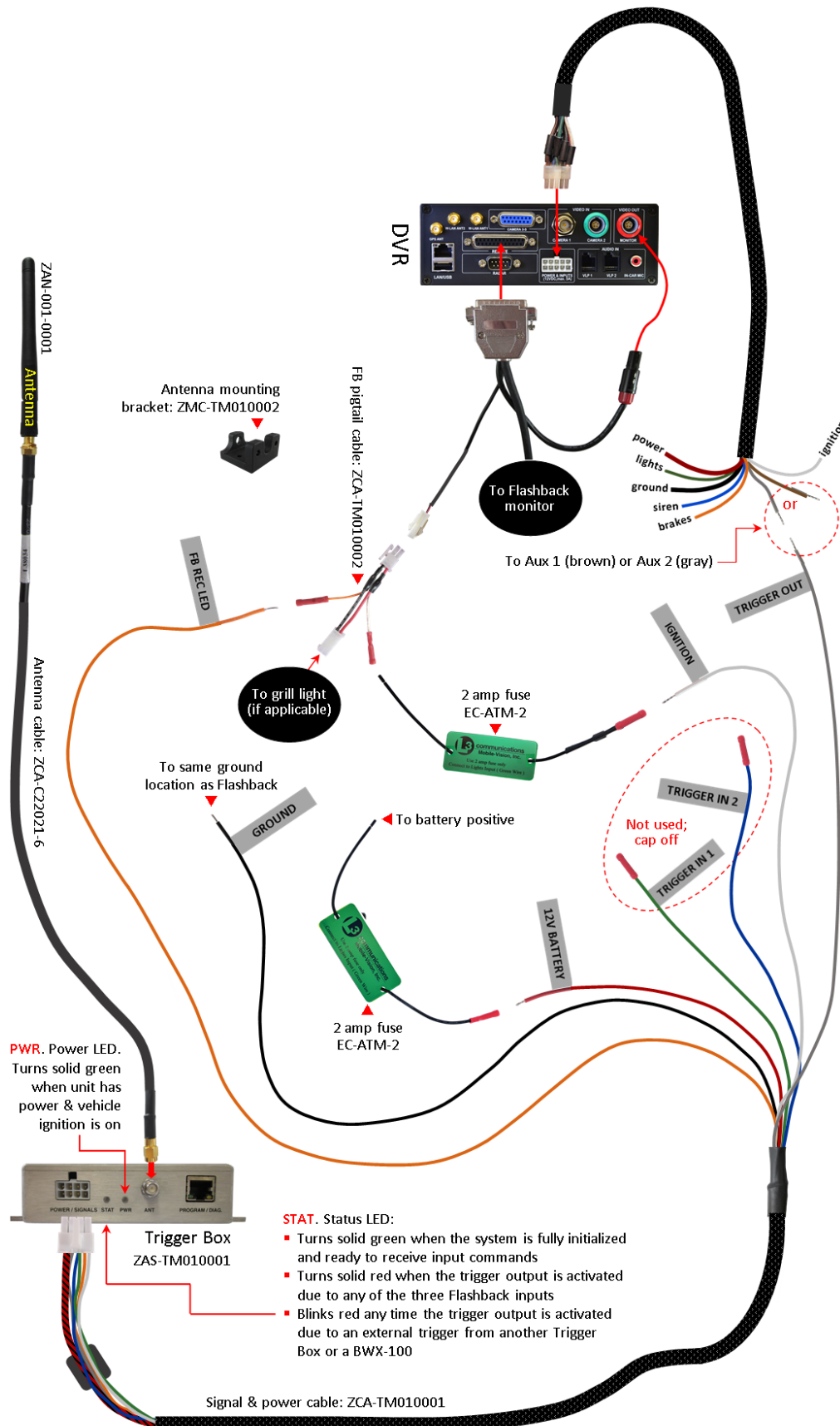
Remain logged into to your video management software for step 9.

9 Configure each of your BWX-100 devices to support remote triggering. This involves logging into your video management software as an Admin user and making the following changes to each device's DVR record (see **Video** tab):

- Set the *Remote Triggering* field to **Enabled**
- Enter an agency identification code in the *Agency Id* field (write this code down, as you'll need it for step 10). For detailed instructions, see "Changing a BWX-100 DVR Record" in the *BWX-100 User's Guide*.

10 Use the Bluetooth Transmitter Configuration Tool application provided by L3 Mobile-Vision to configure the new Bluetooth Transmitter. This involves installing the Bluetooth Transmitter Configuration Tool on a laptop, connecting that laptop to the Bluetooth Transmitter via an Ethernet cable, then logging into the software and selecting your Bluetooth Transmitter settings. For detailed instructions, refer to the *Bluetooth Transmitter Configuration Guide*.**11 Field test the trigger function.** Once the Bluetooth Transmitter is properly installed and configured, turn the vehicle on. Next, position the BWX-100 within 100 feet of the Bluetooth Transmitter with line-of-sight to the antenna.

- *Test Flashback-to-BWX Triggering:* Manually start a Flashback recording. Verify that the BWX-100 started recording, then manually stop the BWX-100 and Flashback recordings.
- *Test BWX-to-Flashback Triggering:* Manually start a BWX-100 recording. Verify that the Flashback started recording, then manually stop both recordings.



Emergency Lights or Siren Activated Version

1 Mount the Bluetooth Transmitter

Begin by selecting a location that is:

- On a flat surface in the trunk or cabin
- Within 4 feet of the antenna and 10 feet of the Flashback DVR, and
- Away from possible spills.

Mount the Bluetooth Transmitter (ZAS-TM010001) to the surface using the self-tapping screws.

2 Mount the antenna

Begin by selecting a location that is within 4 feet of the Bluetooth Transmitter, such as on the vehicle's back deck, cage wall, or A-pillar. Next, mount the antenna (ZAN-001-0001) using the provided bracket hardware (ZMC-TM010002).

3 Connect the antenna cable (ZCA-C22021-6) to the antenna (ZAN-001-0001).

4 Connect the other end of the antenna cable (ZCA-C22021-6) to the Bluetooth Transmitter.

5 Plug the Signal & Power cable (ZCA-TM010001) into the POWER/SIGNAL port on the back of the Bluetooth Transmitter.

6 Make the wiring connections.

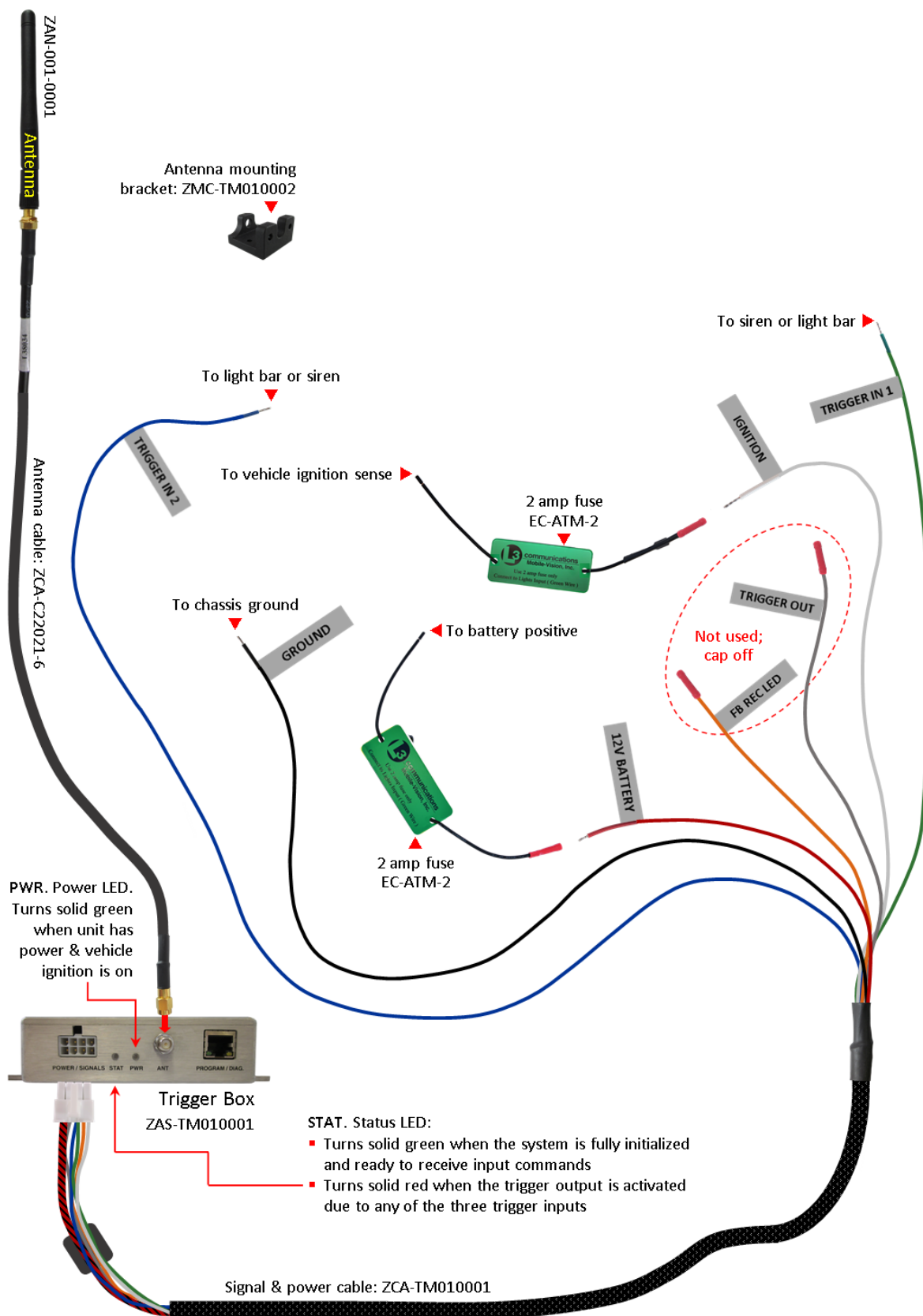
Wire	Color	Connect to...
TRIGGER IN 2	Blue	Emergency lights or siren
GROUND	Black	Chassis ground
12V BATTERY	Red	To 2-amp fuse, then to battery positive
IGNITION	White	To 2-amp fuse, then to vehicle ignition sense
TRIGGER IN 1	Green	Emergency lights or siren

(Continued)

- 7 Configure each of your BWX-100 devices to support remote triggering.** This involves logging into your video management software as an Admin user and making the following changes to the device's DVR record (see **Video** tab):
 - Set the *Remote Triggering* field to **Enabled**
 - Enter an agency identification code in the *Agency Id* field (write this code down, as you'll need it for step 10). For detailed instructions, see "Changing a BWX-100 DVR Record" in the *BWX-100 User's Guide*.
- 8 Use the Bluetooth Transmitter Configuration Tool application provided by L3 Mobile-Vision to configure the new Bluetooth Transmitter.** This involves installing the Bluetooth Transmitter Configuration Tool on a laptop, connecting that laptop to the Bluetooth Transmitter via an Ethernet cable, then logging into the software and selecting your Bluetooth Transmitter settings. For detailed instructions, please refer to the *Bluetooth Transmitter Configuration Guide*.
- 9 Field test the trigger function:**
 - a. Turn the vehicle on.
 - b. Position the BWX-100 within 100 feet of the Bluetooth Transmitter with line-of-sight to the antenna.
 - c. Turn on the vehicle's emergency lights or siren and verify that the BWX-100 started recording.
 - d. Manually stop the BWX-100 recording.



NOTE: In this application, the Bluetooth Transmitter is only used for sending a signal that can be received by other Bluetooth-Transmitter-enabled Flashback systems or trigger-enabled BWX-100s. It does *not* re-broadcast a signal received by other Bluetooth Transmitters or BWX-100s.



FCC Compliance

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.



WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 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 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 the dealer or an experienced radio/TV technician for help.

To comply with FCC/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.

Canadian Users

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.

Under Industry Canada regulations, this radio transmitter may only operate using a dipole antenna and a 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.

This device has been designed to operate with dipole antenna(s), and having a maximum gain of 9 dBi. Dipole antennas having a gain greater than 9 dBi are strictly prohibited for use with this device. The required antenna impedance is 50 ohms.

This device is granted for use in Mobile only configurations in which the antennas used for this transmitter must be installed to provide a separation distance of at least 20cm from all person and not be co-located with any other transmitters except in accordance with FCC and Industry Canada multi-transmitter product procedures.

Utilisateurs Canadiens

Cet appareil est conforme aux normes d'Industrie Canada en ce qui concerne les appareils de type CNR exempts de licence. Son utilisation doit répondre aux deux conditions suivantes :

1) cet appareil ne peut produire d'interférence, et 2) cet appareil doit accepter toute interférence, incluant celle capable de causer son fonctionnement indésiré.

En vertu du règlement d'Industrie Canada, cet émetteur radio ne peut fonctionner que si on utilise une antenne dipôle et un gain maximal (ou moindre) approuvés par Industrie Canada en fonction de l'émetteur. Pour réduire le risque d'interférence radio chez les autres utilisateurs, on recommande de choisir le type d'antenne et son gain de manière à ce que la puissance isotrope rayonnée équivalente (p.i.r.e.) suffise tout juste à assurer une communication efficace.

Cet appareil a été conçu pour être muni d'une antenne dipôle ou plus avec un gain maximal de 9 dBi. Il est strictement interdit d'utiliser des antennes dipôles présentant un gain supérieur à 9 dBi avec cet appareil. L'antenne doit présenter une impédance de 50 ohms.

Cet appareil doit être utilisé uniquement dans les configurations mobiles, alors que les antennes employées avec cet émetteur doivent être installées de manière à présenter une distance de séparation d'au moins 20 cm de tout individu. De plus, elles ne doivent pas se trouver au même endroit que d'autres émetteurs, sauf si on respecte la procédure de la FCC et d'Industrie Canada en ce qui concerne les produits dotés de plusieurs émetteurs.