



INTELLIGENT DOWNSHIFTS

www.AUTO-BLiP.com

User Manual

2015 - 2020 Ford Mustang

Version 3.2

WARNING:

Adjusting the settings of AUTO-BLiP while driving could lead to an accident and/or serious injuries. Changes should only be made when it is safe to do so. The primary attention of the driver should always be on safe driving. As with any gauge or instrumentation system in the vehicle, any information provided by Auto-Blip should be interacted with as part of a normal process of driving safely. **Auto-Blip is intended for racing and/or off-road use only!**

The mounting of AUTO-BLiP and the routing of the cable harness connecting it to the vehicle should be done with caution. This includes but is not limited to the following restrictions:

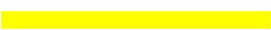
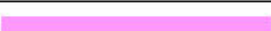
- **Do Not mount the AUTO-BLiP where it can obstruct the view of the driver**
- **Do Not mount the AUTO-BLiP in a manner that could cause it to be propelled through the vehicle during an accident causing injury, such as over or near an air bag**
- **Do Not route the cable in a manner that would interfere with the operation of the vehicle controls**

INTRODUCTION:

Congratulations on your purchase of AUTO-BLiP. Please take the time to read the entire instruction manual before attempting to install. DO NOT attempt the use of AUTO-BLiP until you have completed the entire installation process and the unit has been properly calibrated.

WE STRONGLY RECOMMEND THAT AN EXPERIENCED TECHNICIAN INSTALL AUTO-BLiP!

Color chart with abbreviations:

	black	BK
	brown	BN
	red	RD
	orange	OG
	yellow	YE
	green	GN
	blue	BU
	violet	VT
	grey	GY
	white	WH
	pink	PK
	turquoise	TQ

Attention: If a wire has a stripe it will be called-out by using a forward slash (/) between the main color and the stripe color e.g.: A black wire with purple stripe = BK/PU

Tools (not all may be necessary depending on type of instal):

- Needle nose pliers
- Light (Forehead mounted recommended)
- Wire cutters / strippers - optional
- Digital Multimeter (DMM) - optional
- X-Acto knife or equivalent - optional

CONNECTIONS (IGNITION MUST BE OFF DURING INSTALLATION!):

- 1) When performing this installation, make sure the wire harness is securely routed away from any moving parts! If possible, secure the Auto-Blip harness to the car manufacturer's harness for added safety.**
- 2) Some vehicle are equipped with two switches at the clutch pedal. The Cruise Control Disable switch is mounted higher up under the dashboard. The Safety Interlock switch is down lower on the pedal where it is visible. For this installation, you will only be working with the clutch Safety Interlock switch.**
- 3) Soldering the Auto-Blip harness wires (6) to the respective car wires is not recommended due to the confined and hard to reach location of the various car sensors. Auto- Blip now provides **Posi- tap connectors** as the best alternative for a solid connection that will not damage your car wires when properly installed. **Follow the separate instructions available at www.auto-blip.com/support-center/ for best results.****



- 4) Pay special attention to the position of the wires in the diagrams/pictures for each sensor or switch and not just the wire color. **Pictures in this manual may not be representative of your car's year/make/model.****

ATTENTION: *AUTO-BLiP* will not work until you complete the CALIBRATING UNIT process on page 10

INSTALLATION CHART:

Signal Description	AUTO-BLiP Harness color code	Mustang wiring connections
Ground	Black (BK)	Figure 1 / 1A for 2018-2020 years
Clutch sensor	Yellow (YL)	Figure 1
12v	White (WT)	Figure 2
Brake sensor	Blue (BL)	Figure 2
Accelerator Pedal Position Sensor 1 (APPS)	Red (RD)	Figure 3 **
Accelerator Pedal Position Sensor 2 (APPS)	Green GN)	Figure 3 **

**** Car's APPS wires (steps 5 & 6) are noticeably thinner than the other wires you are tapping into. Extra care is necessary for Posi-tap connectors to make good contact. Needle inside the Posi-tap connector must go through the wire vinyl and into the wire itself (see separate Posi-taps manual for proper installation).**

1. Connect **AUTO-BLiP BLACK (BK)** wire to the standalone wire at the clutch pedal Safety Interlock switch (**Fig 1**). Note: Observe the Safety Interlock Switch connector, it is a 2-pin connector with (3) wires attached to it. In this step you are connecting the Auto-Blip BK wire to the standalone wire, NOT to the dual wires
2. Connect **AUTO-BLiP YELLOW (YL)** wire to either of the other (2) remaining wires at the clutch pedal Safety Interlock Switch as outlined on step 2 above (**Fig 1**).

ATTENTION: On some cars the Safety Interlock switch has only (2) wires. Auto-Blip Black wire goes to Black/Green car wire. Auto-Blip Yellow wire goes to Blue/Red car wire

3. Connect **AUTO-BLiP WHITE (WT)** wire to pin 1 of the Brake Pedal Switch. After unplugging this connector from the brake pedal switch, look at it from the side where the wires go into the white connector. Pin 1 is the first position on the LEFT with the locking tab on top (**Fig 2**).
4. Connect **AUTO-BLiP BLUE (BL)** wire to the wire on the opposite side (right) of the same Brake Pedal Switch as outlined on step 3 above (**Fig 2**).

ATTENTION: Car's APPS wires (steps 5 & 6) are noticeably thinner than other wires you are tapping into. Extra care is necessary for Posi-tap connectors to make good contact. Needle inside the Posi-tap connector must go through the wire vinyl and into the wire itself (see separate Posi-taps manual for proper installation).

5. Connect **AUTO-BLiP RED (RD)** wire to the Accelerator Pedal Position Sensor Pin #5 Blue/White wire (Fig 3). Note: Wire colors may vary with model year, use position when in doubt.
6. Connect **AUTO-BLiP GREEN (GN)** wire to the Accelerator Pedal Position Sensor Pin #2 Yellow/Orange wire (Fig 3). Note: Wire colors may vary with model year, use position when in doubt

Attention: Below instructions are for 2018 to 2020 model years only

1. The safety interlock switch at the clutch pedal is similar to the one in Figure 1, but has 4 wires instead. There is no Ground connection (wire) on this switch.
2. Auto-Blip Black wire (Ground) should be connected to a chassis ground e.g. Fig 1A (bolt on either side of OBD2 port)
3. Auto-Blip Yellow wire connects to the Blue/Red wire at the safety interlock 4-wire switch (similar to Figure 1)

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Figure 1 (Clutch pedal interlock switch connector)

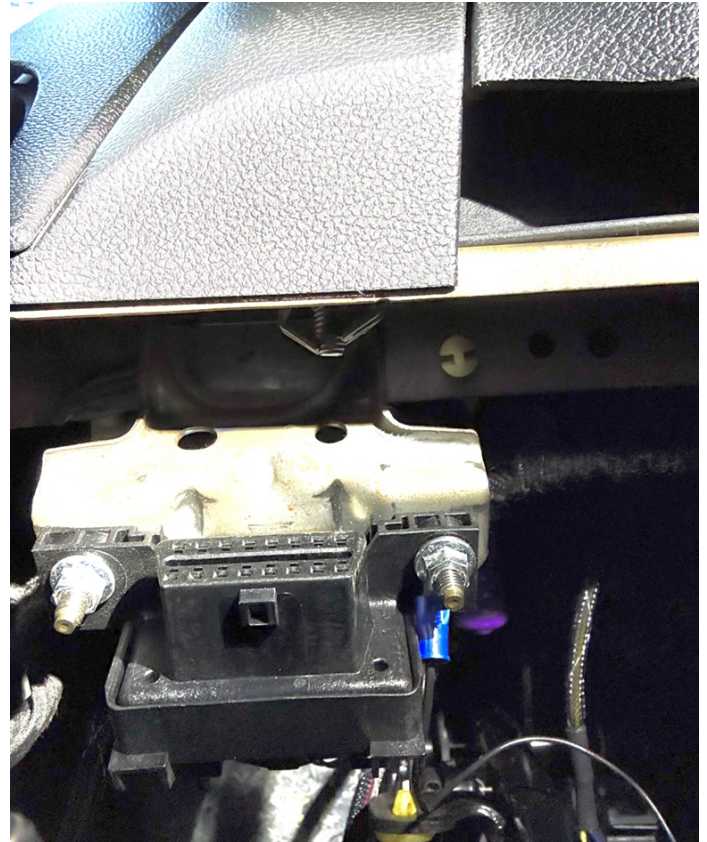


Figure 1A (OBD2 port attachment bolts)

Attention: Below instructions are for 2018 to 2020 model years only

1. The safety interlock switch at the clutch pedal is similar to the one in Figure 1, but has 4 wires instead. There is no Ground connection (wire) on this switch.
2. Auto-Blip Black wire (Ground) should be connected to a chassis ground e.g. Fig 1A (bolt on either side of OBD2 port)
3. Auto-Blip Yellow wire connects to the Blue/Red wire at the safety interlock 4-wire switch (similar to Figure 1)

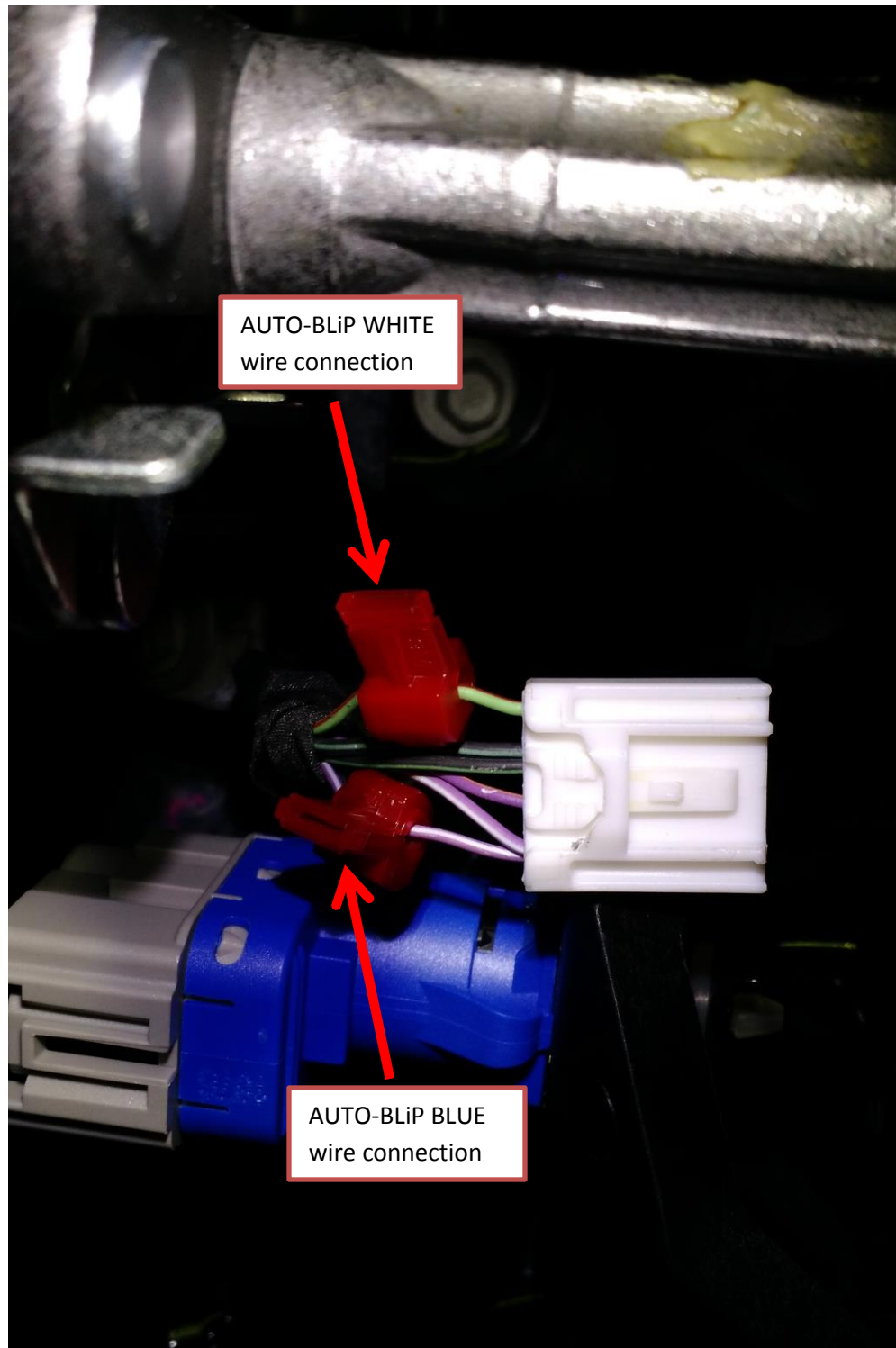


Figure 2 (Brake pedal switch connector)

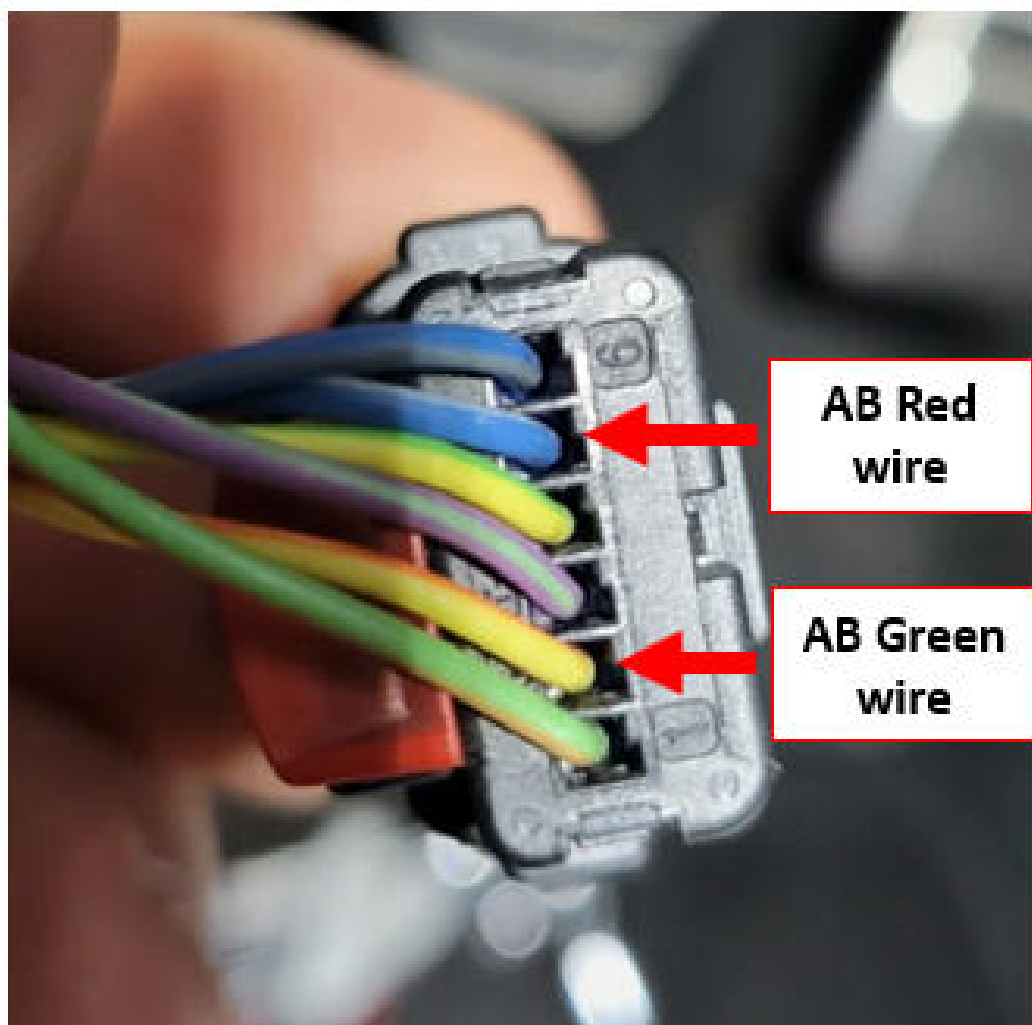


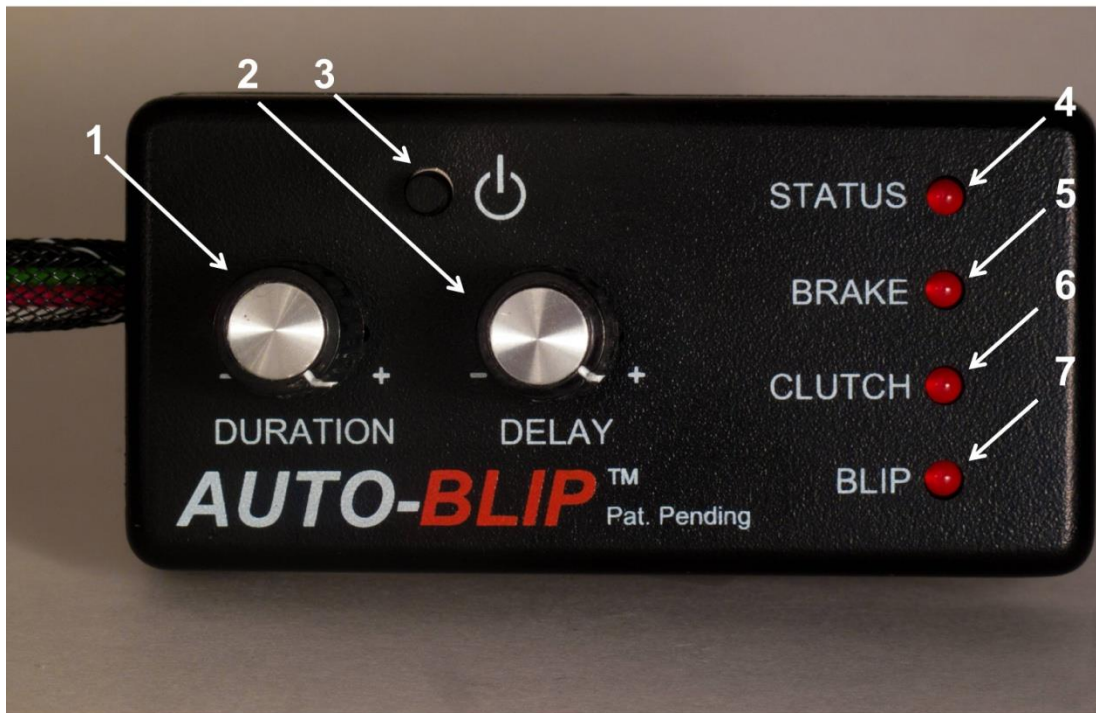
Figure 3 - Accelerator Pedal Position Sensor connector)

Wire connections: AB Red wire connects to Blue/White wire; AB Green wire connects to Yellow/Orange wire; Wire color may vary, use wire position if in doubt.



Figure 5 (Auto-Blip suggested placement)

HOW IT WORKS



1. The “DURATION” dial sets the desirable RPM blip level by opening the throttle. Turn dial clockwise to increase RPM blip level.
2. The “DELAY” dial allows for the insertion of a constant time delay from the time a downshift event is sensed to when the unit blips the throttle. Turn dial clockwise to increase delay. The range is from 0.0 to 0.5 seconds.
3. The ON/OFF button will toggle between the ON and OFF mode. The unit will default to the ON state upon power up.
Note: This button is also use to enable the calibration mode. Refer to the Calibrating Unit section below for more details.
4. The “STATUS” LED turns on when the unit is ON.
5. The “BRAKE” LED turns on when the brake pedal is pressed.
6. The “CLUTCH” LED turns on when the clutch pedal is pressed.
7. The “BLIP” LED turns on when a throttle blip event occurs.

Note: The *AUTO-BLIP* will automatically turn OFF after 6 hours of inactivity. It will remain OFF until the ON/OFF button is pressed or power to the unit is removed and re-applied.

The *AUTO-BLIP* monitors your automobile’s accelerator pedal, brake pedal, and clutch pedal, blipping the throttle only when the clutch pedal is being depressed while simultaneously braking.

CALIBRATING UNIT

In order for your AUTO-BLiP unit to function properly, you must first perform the calibration sequence outlined in this section!!!

1. Turn on ignition, but do not start engine. *AUTO-BLiP* "STATUS" LED light will light up. If not, turn ignition off and verify the power supply and ground connectors are fully seated.
2. Set both the "DURATION" and "DELAY" adjusting dials on the *AUTO-BLiP* unit completely counter clockwise (-).
3. To enter the calibration mode, press and hold down the ON/OFF button (about **10** seconds) until the "STATUS" LED continuously blinks **(1)** time followed by a short pause.
4. Fully press and hold down the accelerator pedal. While holding the accelerator pedal wide open, press and release the ON/OFF button once, while continuing to hold the accelerator pedal down. This step records your vehicle's full open throttle pedal position.
5. At this point the "STATUS" LED light will blink **(2)** times followed by a short pause. Completely release the accelerator pedal. With the accelerator pedal completely released, press and release the ON/OFF button once. This step records your vehicle's close throttle pedal position.
6. At this point the "STATUS" LED light will blink **(3)** times followed by a short pause. Completely press the brake pedal. With the brake pedal completely pressed, press and release the ON/OFF button once, continue to hold the brake pedal down. This step records your vehicle's brake pedal pressed position.
7. At this point the "STATUS" LED light will blink **(4)** times followed by a short pause. Completely release the brake pedal. With the brake pedal completely released, press and release the ON/OFF button once. This step records your vehicle's brake pedal released position.
8. At this point the "STATUS" LED light will blink **(5)** times followed by a short pause. Completely press the clutch pedal. With the clutch pedal completely pressed, press and release the ON/OFF button once, continue to hold the clutch pedal down. This step records your vehicle's clutch pedal pressed position.
9. At this point the "STATUS" LED light will blink **(6)** times followed by a short pause. Completely release the clutch pedal. With the clutch pedal completely released, press and release the ON/OFF button once. This step records your vehicle's clutch pedal released position.
10. This completes calibration of the *AUTO-BLiP* unit!

Note: When properly calibrated, the "BRAKE" and "CLUTCH" LEDs will turn on when the corresponding pedal is pressed.

The AUTO-BLiP features a diagnostic function that will warn the user when the AUTO-BLiP's calibration routine fails to properly recognize the accelerator pedal position sensor (APPS), BRAKE, and/or CLUTCH signals. Failures related to the BRAKE and/or CLUTCH will prevent the unit from exiting the calibration sequence. This is done to prevent AUTO-BLiP from blipping the throttle at the incorrect time. When a failure is detected the AUTO-BLiP will continuously blink the "BRAKE", "CLUTCH", and/or "BLIP" LEDs, signaling a failure during calibration of the respective signals. Press and release the ON/OFF button once to re-start the calibration sequence from the beginning.

TECH SUPPORT

In the event of a malfunction, please check the following:

1. Turn off ignition then verify all connectors are fully seated.
2. Make sure the unit is properly powered. When unit is properly powered the “STATUS” LED will remain continuously lit.
3. Be sure the unit has been calibrated, as outlined in the calibration section, according to your vehicle’s model and year.
4. Check harness for cuts, scrapes or abrasions.
5. Technical support: call (713)289-4015 (Mon-Fri from 9A-3P CST); email al@auto-blip.com

AUTO-BLiP LIMITED WARRANTY

Tractive Technology, LLC warrants this product against defects in material and workmanship for the period of 90 days. The warranty period begins with the date of original retail purchase.

This limited warranty is made only to the original end user purchaser ("you") of the product and does not extend to any subsequent purchasers or owners of the product. The "original end user" is the first user to put the product into service in any fashion. It is your responsibility to establish the warranty period by verifying the original purchase date.

If you discover a defect, Tractive Technology, LLC will, at its option, repair or replace this product with a new or reconditioned product at no charge to you, provided you return it during the warranty period, with transportation charges prepaid, to Tractive Technology, LLC. (You can obtain additional information by contacting Tractive Technology, LLC at the contact information bellow). Please attach your name, address, telephone number, and a copy of the bill of sale as proof of date of original retail purchase, as well as a detailed description of the problem for which service is requested. Prior to returning the product, you must obtain from Tractive Technology, LLC a Return Merchandise Authorization Number (RMA#). You are responsible for packing the product to be returned. If the repairs are covered by the Limited Warranty and if the product was properly shipped to Tractive Technology, LLC, Tractive Technology, LLC will pay the return shipping charges. This warranty applies only to AUTO-BLiP product manufactured by Tractive Technology, LLC that can be identified by the "AUTO-BLiP" trademark, trade name, or logo affixed to them. This warranty does not cover damage resulting from an accident, misuse, abuse, or neglect and/or damage during any type of transportation resulting from improper packaging; damage to any product which has been altered in any fashion, including the alteration or removal of any Tractive Technology, LLC serial number; damage resulting from causes other than product defects, including and not by way of limitation, lack of technical skill, competence, or experience of the user, and/or failure to use the product in accordance with the instructions provided in the User's Manual; and service performance by an unauthorized person or entity. Any implied warranties including fitness for use and merchantability are limited in duration to the period of the expressed warranty set forth above. The remedies provided under this warranty are exclusive and in lieu of all others. Tractive Technology, LLC hereby expressly disclaims liability and shall not be responsible for incidental, consequential and contingent damages or any kind of nature, including, without limitation: damages to persons or property, whether a claim for such damages is based upon warranty, contract, tort or otherwise; damages to persons or property, whether a claim for such damages is based upon warranty, contract, tort or otherwise; damages due to or arising out of the loss of date; or lost of profits. Tractive Technology, LLC shall not be responsible for any damages caused by the presence of error or omission in any of its manuals, instructions or related materials.

For warranty claims contact:

Latitude 305, LLC

(713)289-4015

or email:

al@auto-blip.com