

## **General TA**

### *How does it know when to deploy?*

Tech-Air uses a series of 3 accelerometers and 3 gyroscopes that read your movement on the bike 1,000 times per second, which are fed through an algorithm on the on-board Airbag Control Unit to determine if any sort of crash is imminent. The algorithms and sensor suite used on modern Tech-Air systems are the culmination of over 20 years of research and development, thanks to the analysis of millions of miles and thousands of crashes, from every type of rider including everyday commuters to MotoGP athletes, allowing them to be extremely reliable.

### *Does it hurt when it deploys?*

No – the airbag is designed to expand outwards, so when it's worn with a compatible and properly fitting jacket or garment, it's not painful or uncomfortable.

### *Will it deploy if I brake really hard?*

Tech-Air is designed to be used in all normal riding conditions – Tech-Air won't deploy under any braking/turning/acceleration that a motorcycle is capable of, as proven by its extensive use in professional racing.

### *Will it deploy if I do a wheelie?*

Tech-Air systems have been used for thousands of wheelies with no issues – a natural power wheelie out of a corner won't deploy the airbag, but Tech-Air isn't designed for full-on "stunting" (e.g. 12 o'clock wheelies, seat stand wheelies, etc.)

### *Does it deploy if I trip and fall while walking around?*

It might - with the algorithm tuned to detect crashes on a motorcycle, it's not designed to be used off the motorcycle. Make a habit to take off or deactivate your airbag when you get off your motorcycle after your ride.

### *How long does it stay inflated?*

The airbag will stay fully inflated for over five seconds – our data shows that the average crash duration is only a few seconds, allowing the rider to have full protection for double that time. The airbag will slowly deflate automatically over the next several minutes.

### *Do I need my phone nearby for the system to work?*

No – Tech-Air's functionality is not dependent on a Bluetooth connection with your phone.

### *Do I need the app on my phone?*

It's necessary to use the Tech-Air App to change algorithms, update software, see exact battery percentage, and a number of other features – but it's not necessary to be used on a day-to-day basis, such as arming your airbag for your ride.

### *What's the warranty?*

Like all Alpinestars products, Tech-Air airbags carry a one-year warranty from date of purchase covering any manufacturing defects, but not user wear and tear.

### *What type of gas inflates the airbag?*

Tech-Air is inflated with Argon gas – more dense than CO2 or compressed air, and inert which allows the system to deploy much faster.

### *Can I wear a backpack with it?*

Tech-Air can be used under a backpack, but it should not be worn too tight to hinder the airbag's deployment or expansion, and the backpack should weigh no more than 6kg/13lbs.

### *What does Tech-Air Ready mean?*

Tech-Air Ready garments are optimized for airbag use, designed from the beginning to accommodate the expansion of Tech-Air deployment with strategically placed stretch panels.

### *Can I wear the Tech-Air system with a neck brace?*

No, Tech-Air provides neck protection with airbag coverage on the top of the shoulders, and is not compatible with a neck brace.

### *Can I wear a cooling vest with Tech-Air?*

Yes, but it needs to be worn underneath the Tech-Air.

### *How do I store the Tech-Air when I'm not using it?*

The best way to is to give the unit a good charge before storing - plug it in for at least 5-6 hours and then disconnect and you're good for a few months or more before needing to give it another quick charge. Tech-Air products use Lithium-ion batteries and they need some maintenance from time-to-time.

### *What's the best way to transport my Tech-Air when I travel?*

Make sure that the system is off - keep the activation flaps/sensors separate so that it doesn't arm itself, and lay the system flat so there's no bunching.

## **TA5**

### *What jackets can I wear with TA5?*

Tech-Air 5 can be worn under any properly fitting Alpinestars Tech-Air Ready or Tech-Air Compatible jacket, or any brand leather or textile jacket with 4 cm of space around the circumference of the rider's chest. If you prefer to wear Tech-Air on the outside, please consider purchasing the Tech-Air 3 [\[link\]](#)

### *What happens after I crash and deploy my airbag? Is it single-use?*

After each deployment, the airbag needs to be repacked by Alpinestars or by an authorized Tech-Air service center – the charge for canister replacement is \$180, with every 3<sup>rd</sup> repack costing \$300, where both the canisters and the airbag bladder are replaced

### *How long does the battery last? Where is the charging port? What type of charger cable does it use?*

Tech-Air 5's battery allows 30 hours of riding time, and is charged by a Micro USB cable with a port located on the back protector. A low or dead battery takes approximately 4 hours to fully charge, with one hour of charge time providing 7-8 hours of ride time.

### *How much does it weigh?*

Tech-Air 5 weighs roughly 4 pounds, depending on the size – but with the weight being worn so close to your body, it's hardly noticeable.

### *How do I choose my size?*

Start with your T-shirt size, and adjust as needed – Tech-Air 5 should fit snugly, but not so tight that you have discomfort/pinching anywhere, such as the armpits.

*What areas does it protect?*

Tech-Air 5 covers the rider's shoulders, chest, ribs, collar bones, and full back – essentially everywhere a T-shirt covers is protected by the airbag.

*What algorithms are available with it?*

The Tech-Air 5 comes with two switchable algorithms – street and race.

*How do you turn it on?*

The Velcro closure at the top of the zipper contains a sensor – after you zip up your Tech-Air 5, close the Velcro and the system will arm automatically.

*Can I use it offroad?*

Tech-Air 5 can be used for light offroad riding in "street" mode – fire roads, gravel, ADV bikes or similar. Tech-Air 5 shouldn't be used for motocross, aggressive enduro riding, or jumping.

*How do you wash it?*

For cleaning, do not submerge the Tech-Air system in water. We recommend spot-cleaning with a microfiber cloth, while making sure to stay away from the electrical areas. Use cold or room-temperature water, add mild detergent (ex. Woolite), submerge a microfiber cloth, squeeze it out and proceed to wipe/spot clean the left and right inner liner, neck collar, and back area. Stay away from the front clasp sensor and ACU on the back where the electrical ports are. Hang dry in a ventilated area if needed, away from direct sunlight. Anti-microbial athletic cleaners are also a good option.

*Can I wear it without a Tech-Air Ready jacket?*

Yes, Tech-Air can be safely worn underneath any textile jacket, or any leather jacket that has at least 4cm of room for expansion. If you have a Tech-Air ready jacket that is leather, you do not need the 4cm of extra room.

*Do I need to take out my jacket's removable protectors?*

We recommend leaving in elbow and shoulder armor, but removing the back protector – the Tech-Air 5's built-in back protector makes an additional one unnecessary.

**TA3**

*What jackets can I wear with TA3?*

Tech-Air 3 can be worn on top of any garment when riding, as it has abrasion resistance in the outer layer. Tech-Air 3 can also be worn under any properly fitting textile jacket or Tech-Air compatible jacket, or any leather jacket with 4 cm of space around the circumference of the rider's chest.

*What happens after I crash and deploy my airbag? Is it single-use?*

After each deployment, the airbag needs to be repacked with by Alpinestars or an authorized Tech-Air service center. Assuming the airbag bladder is undamaged after the crash, the charge for canister replacement is \$100, with every 3<sup>rd</sup> repack costing \$200, where both the canister and the airbag bladder are replaced

*How long does the battery last? Where is the charging port? What type of charger cable does it use?*

Tech-Air 3's battery allows 40 hours of riding time, and is charged by a USB-C cable through a port located on the LED panel. A low or dead battery takes approximately 4 hours to fully charge, with one hour of charge time providing 8-10 hours of ride time.

*How much does it weigh?*

Tech-Air 3 weighs roughly 3 pounds, depending on the size – but with the weight being worn so close to your body, it's hardly noticeable.

*How do I choose my size?*

Match the sizing of Tech-Air 3 to the jacket size if you intend to wear it on the outside of the jacket (ex. Medium TA3 if worn over a Medium jacket or garment). If you want to wear a Tech-Air 3 inside the jacket only, you may prefer to go down a size.

*What areas does it protect?*

Tech-Air 3 Protects your chest, top of your shoulders, and full back.

*What algorithms are available with it?*

Tech-Air 3 uses the street algorithm only. If you want to ride trackdays with Tech-Air, consider the Tech-Air 5 or Tech-Air 10 [links] which offer the race algorithm.

*How do you turn it on?*

A sensor behind the front zipper near the LED detects when it's closed – zip up your Tech-Air 3 and you will feel a vibration from the system when it arms, as well as the LED panel turning solid blue.

*Can I use it offroad?*

Tech-Air 5 can be used for light offroad riding in "street" mode – fire roads, gravel, ADV bikes or similar. Tech-Air 3 shouldn't be used for motocross, aggressive enduro riding, or jumping.

*How do you wash it?*

For cleaning the Tech-Air 3, you can remove the airbag bladder and all electrical components including the battery and canister case, the ACU, and the LED panel to leave just the outer material chassis. We recommend cleaning with a damp microfiber cloth and mild detergent (ex. Woolite). Hang dry in a ventilated area if needed, away from direct sunlight.

*Can I wear it without a Tech-Air Ready jacket?*

Yes – Tech-Air 3 can be worn on the outside of any garment you are wearing. Tech-Air 3 can also be safely worn underneath any textile jacket, or leather jacket that has at least 4cm of room for expansion. If you have a Tech-Air ready jacket that is leather, you do not need the 4cm of extra room.

*Do I need to take out my jacket's removable protectors?*

We recommend leaving in elbow/shoulder armor – a back protector can be kept in the jacket, or put in the Tech-Air 3's back protector pocket if you prefer.

## **TA10**

### *What jackets/suits can I wear with TA10?*

Tech-Air 10 is best worn with a one- or two-piece riding suit – a leather suit needs to be Tech-Air Ready, or have 4cm of room in the torso and 2cm in the hips to accommodate airbag expansion. Tech-Air 10 can also be used with textile jacket/pant combos, but not with a tight-fitting belt.

### *What happens after I crash and deploy my airbag? Is it single-use?*

After each deployment, the airbag needs to be repacked with by Alpinestars or by an authorized Tech-Air service center. Assuming the airbag is undamaged after the crash, the charge for canister replacement is \$200, with every 3<sup>rd</sup> repack costing \$400, where both the canisters and the airbag bladder are replaced.

### *How long does the battery last? Where is the charging port? What type of charger cable does it use?*

Tech-Air 10's battery allows 24 hours of riding time, and is charged by a USB-C cable through a port located on the back protector. A low or dead battery takes approximately 4 hours to fully charge, with one hour of charge time providing 6-7 hours of ride time.

### *How long does the remote LED battery last? How do I charge it?*

The LED remote has a battery life of 20 hours, and is charged by attaching to its docking point on the Tech-Air 10's waistband. The Tech-Air 10 does not need to be plugged in to charge the LED.

### *What do I do with the remote LED?*

The remote LED is used to indicate it's armed and battery status – it can be put in a pocket on the left arm of select Alpinestars one-piece suits, or anywhere else you'd like such as on the dashboard or top clamp of your handlebars/clip ons. It's not necessary to have the LED with you for the airbag to function.

### *How much does it weigh?*

Tech-Air 10 weighs roughly 5 pounds, depending on the size – but with the weight being worn so close to your body, it's hardly noticeable.

### *How do I choose my size?*

Generally, the Tech-Air 10 should be sized by your t-shirt size.

### *What areas does it protect?*

Tech-Air 10 has by far the most protective coverage of any airbag available, protecting the rider's shoulders, chest, ribs, full back, hips, and coccyx.

### *What algorithms are available with it?*

The Tech-Air 10 comes with two switchable algorithms – race and street.

### *How do you turn it on?*

Tech-Air 10 is armed by closing the waist band on the front of the system – a sensor in it arms the system.

### *How do you wash it?*

The Tech-Air 10 base layer can be removed from the back protector/airbag bladder/ACU, and washed separately by machine (hang dry only)