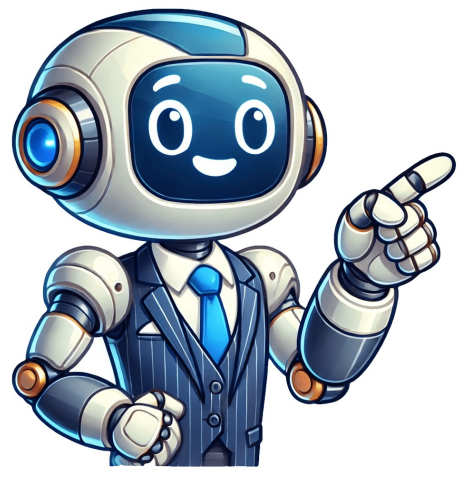


I'm not a bot



Today while using Fly 1.2.2 iOS I went to test RTH as I was intending to fly with the wind, when I initiated RTH even tho I had 24 - 25 satellites locked the Mini 2 advised Atti Mode! I tried this twice and on both occasions Atti Mode was advised (not sure if it actually went into Atti Mode because the AC seems stable). Today while using Fly 1.2.2 iOS I went to test RTH as I was intending to fly with the wind, when I initiated RTH even tho I had 24 - 25 satellites locked the Mini 2 advised Atti Mode! I tried this twice and on both occasions Atti Mode was advised (not sure if it actually went into Atti Mode because the AC seems stable). Atti mode doesn't advise as you can't select it. If it says Atti mode...it's in it. not sure what your question is. RTH works in Atti mode. Why it went into is a question that could have a bajillion reasons...but at this point I would keep an eye on your future flights and if it continues, you need to send in for service. First thing is I would refresh firmware using Asst. 2. Does it ever go into Atti in normal flight or just RTH? If either in most flights...Send to DJI for repair. Toggle signature USMC Retired Atti mode doesn't advise as you can't select it. IF it says Atti mode...it's in it. not sure what your question is. RTH works in Atti mode. Why it went into is a question that could have a bajillion reasons...but at this point I would keep an eye on your future flights and if it continues, you need to send in for service. First thing is I would refresh firmware using Asst. 2. Does it ever go into Atti in normal flight or just RTH? If either in most flights...Send to DJI for repair. Why would RTH work in Atti mode? You need GPS for RTH? If you're in Atti Mode GPS is ignored. GPS can still be used for telemetry and position on the map assuming GPS is not the cause for jumping into Atti. Compass, IMU or simply glitch in flight control can cause ATTI, but this flight looked perfect. Id be interested to know where those ideas come from because the only reason I know of to go into ATTI is loss of GPS. I tested it again in a different location, same response, the drone returns to the home point without issue. Im going to try my partners Android phone tomorrow as this only started happening since I update my iPhone (Ive had the Mini 2 since launch). I tested it again in a different location, same response, the drone returns to the home point without issue. Im going to try my partners Android phone tomorrow as this only started happening since I update my iPhone (Ive had the Mini 2 since launch). If RTH works, GPS must be good. I think the warning message is just an indication error, the only reason I know of to go into ATTI is loss of GPS. GPS alone is not sufficient for navigation, the craft MUST be able to tell the orientation accurately. If the craft detects issues with the IMU or the compass making it lose confidence in the reliability of the orientation data . It will go into ATTI mode. That has been seen in flight logs posted in this forum. Id be interested to know where those ideas come from because the only reason I know of to go into ATTI is loss of GPS. In flight compass issues have triggered ATTI. If FC determines stable flight cannot be maintained with current sensor inputs, particularly compass, GPS and VPS, it will switch to ATTI and rely only on gyros, accelerometers and barometer. This happened to me about a year ago where after about 5 to 10 minutes in flight on my P3A, I was getting tilted horizon (which I thought was a failed gimbal at first), then compass error, then ATTI. In ATTI horizon stabilized. Map still showed my AC location so GPS had to still be good. A minute or so later I had P-GPS back.I didn't panic as I had altitude, good signal so I could use map and FPV to steer myself back, with wiggle room to accommodate wind drift. Last edited: Dec 27, 2020 Had the Atti issue the other day on two flights, even though it was clearly flying using the GPS.Today done two more flights and no Atti notifications. So might need to fly back at the other location and see if it happens again. If you're a DJI drone pilot, you're likely come across ATTI mode at some point. Now a built-in feature on newer models, ATTI mode is a setting you can manually select on older DJI drones like the Phantom 3 and 4. Its also manually available on commercial drones such as the Matrice and Inspire 2 though its referred to as A mode on these. But what exactly is ATTI mode and how can it affect your flying?Today, well be discussing everything you need to know about DJIs ATTI mode. In the right circumstances, it can be a super useful feature that can save you from losing your drone. Lets take a look.Contents:Whats ATTI Mode?P Mode, S Mode and OPTI ModeWhy Do People Like to Fly in ATTI Mode?When Will I Need to Fly in ATTI Mode?Should I Learn to Fly in ATTI Mode?Steps to Take When Learning to Fly in ATTI ModeWhats ATTI Mode?ATTI Mode, short for Attitude Mode, is a DJI-specific mode that allows drone flight without the use of GPS or VPS (Vision Position Systems). ATTI mode is also other drones too but it may have a slightly different name.Because GPS/VPS are deactivated in ATTI mode, you need to be aware that there'll be no obstacle avoidance and your drone wont course correct if theres a gust of wind.When in ATTI mode, your drone will attempt to keep its altitude based on barometer readings but will drift forwards, backward, and side to side in the wind. Youll need to manually adjust your course to counteract the wind making it extremely difficult to fly in bad conditions.In ATTI mode your drone also wont automatically break. If you want to slow down, youll have to move the stick into the opposite position kind of like a reverse thruster. Some other modes you may want to note are Positioning(P) mode, Sport(S) mode, and OPTI-mode. The latter is only available on a few drones. P ModeThis is the standard mode your drone will usually be in. Both GPS and VPS are active and will help your drone to be stable during flight, even in windy conditions. S ModeSport mode is designed for those of you who want your drone to go fast. When activated, your GPS will still be running, but only the side VPS are turned on. Youll notice that when you fly in this mode, your drone will tilt more to generate speed.OPTI ModeIf your drone doesnt have an adequate GPS signal, it may go into OPTI mode, which is purely run on the VPS. However, using the VPS alone can be detrimental because it doesnt do well at low altitudes, in the dark, or when flying over reflective surfaces like water. Why Do People Like to Fly in ATTI Mode?So if its so difficult, why would people want to fly in this mode?One of the main benefits of flying in ATTI mode is that youll end up with a much smoother picture when filming, which makes it appealing to professional videographers and hobbyist cinematographers who want to capture the best footage they can. Additionally, it makes it easier to fly your drone in narrow or enclosed spaces. Also, its simply more fun, and people like a challenge.Flying in ATTI mode will present a lot more difficulties and overall make you a better drone pilot. Additionally, if you have a drone that can manually switch to ATTI mode, its great practice in the event your drone auto-switches to this mode mid-flight as youll know how to react and will be able to control your drone safely.Finally, some people like to fly their drones indoors. Though we dont recommend flying drones inside (unless its a small toy drone designed for indoor flight), many people still will, and more often than not, the GPS will fail. When Will I Need to Fly in ATTI Mode?Any time that your drones GPS fails, whether youre in the sky or not taken off yet, your drone will kick into ATTI mode. But why does the drone GPS fail?Failure can happen for many reasons including interference, shielding, or just a general system failure. It can also happen if your drone has compass issues, so its important to recalibrate your compass regularly especially traveling by air. Regardless of the reason, its your responsibility to be able to control the drone and be able to land it safely. Should I Learn to Fly in ATTI Mode?Flying your drone without any sort of guidance is a real skill that you need to master, and you cant master things overnight. 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I'm new to flying drones but have over 300 hours of actual flight time in an ultralight. I was flying my Mavic Pro Platinum on an overcast day, about 30 degrees out and with some snafus at the time that I took off. I took off on a field and flew over a frozen river. I was at about 165 feet AGL (which as it turned out was too high to see the Mavic because of the low ceiling that day) when I saw a message about a compass error and it went into ATTI mode. I dropped altitude until I was able to see it so that I could fly VFR. I then noticed that it was drifting in the wind and not holding position. I concluded the drifting was due to the loss of GPS in ATTI mode? Once I lost altitude I recovered GPS and was no longer in ATTI mode. I'm curious what might have caused the problem that put it into ATTI mode? Would the overcast sky have interfered with the GPS satellite reception? From what I've read here, it sounds like the logs would tell the story. I deleted the logs a few days ago, however. So mainly I'm curious to hear what types of conditions you've seen where it will go into ATTI mode?Thank you! The logs will tell you exactly what happened but speculating, you bird likely suffered a strong interference that affected the compass. Do you think the interference was due to the take off location? I was in an open field but I know there tends to be a lot of metal junk in the ground around here. If you saw a compass error then the reason for the switch to ATTI mode was a disagreement on the heading between the magnetometers (compass) and the rate gyros. When that happens the flight controller cannot trust that it knows the direction that the aircraft is facing, and therefore cannot hold position or navigate. It switches to ATTI mode in which all it does is hold the aircraft level and maintain altitude. Toggle signature Flight log retrieval and analysis guide Reactions:macoman I am a scary moment, you are flying your DJI drone and for the first time you get a notification on the display to switch to ATTI mode. Like everything in life it always seems to happen when you least expect it and for me it was while I photographing a shipwreck with the drone over the sea on a relatively windy day.If you are flying drones then then you need to know and understand the different modes and their effects on your drone. The last thing you need is to be in a situation where your drone is in the air and you are left scratching your head thinking what is ATTI mode?At all times, you need to know where you are and what you are doing and what you are doing and what you are doing. What is ATTI Mode?A DJI drone will automatically switch to ATTI mode short for Attitude mode when the GPS signal is weak, compass experiences interference, or the vision systems are unavailable or disabled. Extra caution needs to be taken when flying in this mode especially in confined spaces as the drone cannot position or brake itself and can increase the risk of potential flight hazards due to the lack of obstacle avoidance. This can result in the drone being affected by environmental conditions such as wind causing the drone to drift horizontally. Drone Preflight ChecksDrones are amazing aircraft with very sophisticated sensors and intelligent software to enable you to fly your device safely but like everything can fail and certainly should never be taken for granted. First steps a pilot should undertake are preflight checks before you send your drone off to your desired location and this will reduce the risk of in flight malfunction. These are checks immediately before flight and dont include yodue diligence checks that should be performed before you leave for your flight destination such as software updates, restrictions, permissions, route planning and weather etc.Quick check of aircraft for any sign of damagePropellers are in good condition, tight and free to rotate.Check Gimbal covers removedCheck all connections are securePower on Handset and any connected devices such as Mobile phone or tabletsCheck Battery level and ensure fully chargedPower on Drone and check fully chargedCheck signal strength connection to handsetCheck GPS Satellite StrengthCheck compass correctly calibrated and location indicator is facing the correct way to device application. Rotate drone 90 degrees at a time to ensure locator maintains correct direction.One final check of surroundings to ensure its clear of any obstaclesTake off and hover and check everything ok then increase height to 15ft and hover for 20 seconds observing correct behaviour.Rotate drone through full 360 degrees checking Signal strength, Satellite Strength and compass bearing indicator maintains correct direction.Check controls are responsive in all directions.Fly to desired destination keeping the drone in line of site at all times, fly sensibly and maintain drone code and return to home point when you are ready to land. If you are in the habit of changing back and forth between home point settings between take off and RC positions to ensure you know what your drone is doing.To manually update the home point in the DJI GO 4 app, go to settings > Main Controller Settings > Advanced Settings > RC lost signal instructionYou can give your drone pre-set instruction on what to do in the event you ever lose signal and your aircraft disconnects from the controller. You have 3 options: Return to home (RTH), Land and Hover. These are options that need to be thought about when flying your drone for instance you dont want it to land if flying over water.To do this, go to settings > Main Controller Settings > Advanced Settings > Remote Controller Signal Lost > Return-To-Home Set correct RTH AltitudeThis setting is often overlooked and I am as guilty as anyone but one you need to check before you fly your drone. Sometimes I will be using the drone for photography in a forest where it is under a dense tree canopy and the last thing I need is for my drone to RTH and all of a sudden gain altitude to my preset value and crash into the tree canopy.To set the RTH altitude in the DJI GO 4 app, go to settings > Main Controller Settings > Return-To-Home Altitude DJI Firmware Updatesat cent stress this enough and that is always always update your drone firmware if required before you fly your aircraft. My big tip for this is to power on your drone before your leave home and do a quick check for any firmware updates. There is nothing more frustrating than driving to a destination powering up your drone to get some epic footage to just get the firmware update message pop up which always seems to happen when you have little to no signal. With poor data signal this can take a long time and then you have either missed your shot or depleted most of a battery while it is just sitting there trying to update.It takes a few minutes before you leave home so make it common practice and save yourself a lot of time and frustration! DJI Inconsistent Firmware Found MessageIf you get this then dont panic just slide the slider across to update I find this usually happens when you update your drone but do not check your spare batteries. Many people do realise that it is not just the drone itself and controller that have firmware updates but also batteries and is so easily overlooked.Always keep your eye on what is being updated when performing these firmware updates to see if there is anything for the batteries and if there are then you will need to power off the drone swap out the batteries and carry out the update for each one. Once complete this should fix the Inconsistent Firmware Message but power everything off and check to make sure.Never fly your drone requiring firmware updates or ignoring Inconsistent Firmware messages, if you do then you are asking for trouble there are so for a reason! Pilot ErrorYou hear many horror stories about drone failure following a serious malfunction but this is very rare, I wont say it doesnt happen but most of the time it is due to pilot error and if you follow the above simple steps you will seriously reduce the risk of a flight malfunction.You can try flying your drone in a forced ATTI mode so you can practice controlling the drone under these conditions in a safe environment but extreme caution needs to be taken. Not all drones can be switched to ATTI mode so you will need to check if it is possible on your specific drone.Happy flying and most of all follow the drone code, think and be sensible!With years of experience and a number of award winning photographs Nigel Waters is a UK landscape photographer based in Worcestershire. With a passion for the great outdoors and continually chasing the light to capture beautiful photographs his landscape, seascape and nightscape photography will give you inspiration to get out and explore the best British landscapes have to offer.If youre a DJI drone pilot, you're likely come across ATTI mode at some point. Now a built-in feature on newer models, ATTI mode is a setting you can manually select on older DJI drones like the Phantom 3 and 4. Its also manually available on commercial drones such as the Matrice and Inspire 2 though its referred to as A mode on these. 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The Hubsan 501s is a great, sub \$200 drone and if you do crash, at least youve not done it to a \$450+ drone.If your budget is really slim, you can also use a toy drone to help you learn how to fly without GPS and obstacle avoidance. We recently did a round-up of the best micro drones and theyre a great way to perfect your flying skills. Theyre lightweight, super cheap, and put simply if you can fly them well, you can pretty much fly anything. Dont take them outside though. Steps to Take When Learning to Fly in ATTI ModeWhen practicing flying in ATTI mode for the first time, we recommend taking your drone out into a wide-open space with no obstacles. Also, make sure theres little to no wind youd be surprised how much your drone can drift even in seemingly calm conditions.If you know anyone who has experience flying in ATTI mode, invite them along to help you, or seek advice from your local drone club.When taking off and landing, use Positioning(P) mode and then switch to ATTI once youre stable and ready.Hover your drone close by so you can see it easily and monitor the way it drifts and operates. Make regular small course corrections as soon as you see it move. Remember if things get out of hand you can always switch back into P mode.Try to practice some simple flying maneuvers. Practice hovering over static objects like cones or whatever you have lying around and then move on to turns. Once you feel comfortable, try flying in a figure of eight shapes. This will help you to get used to how your controls react in a real-life setting.After youve had a fair amount of practice, and you know what to expect, you can start taking the drone out in gradually windier conditions to see how it handles. Keep practicing until youre fully confident that you could recover your drone if it automatically went into ATTI mode midflight and keep your memory fresh by flying like this every so often. Final ThoughtsWe hope this covers everything you need to know about ATTI mode and that youre in a position to practice flying your drone this way to avoid unnecessary disaster if you lose GPS/VPS.Remember when youre just setting up your drone, it may take a few minutes for the GPS to kick in. Dont be impatient and wait for the signal, this way you wont accidentally end up in ATTI mode and inadvertently crash your drone. Let us know your experience flying in ATTI mode below. Toggle signature TJ has posted acronyms at the top of the Discussion page (Sticky)Just in case you wanted to explore those. Toggle signature Reactions:JmP Florida So I'm interested then if you're indoors and in ATTI mode, then your Mavic acquired GPS, say through the greenhouse window, will it stabilise more or could it move about as it relocates its position. If so is this why there are many mishaps indoors? I would like to try indoors but am a little worried.Sent from my iPad using MavicPilots If you are indoors then if you're indoors and in ATTI mode, then your Mavic acquired GPS, say through the greenhouse window, will it stabilise more or could it move about as it relocates its position. If so is this why there are many mishaps indoors? I would like to try indoors but am a little worried.Sent from my iPad using MavicPilots If you are indoors