



AXAID ©
MIAP24 PRO

MANUAL

V1.1

Introduction

Welcome to your MIAP PRO 24, an advanced controller designed to meet the precise needs of enthusiasts and professionals alike. This manual provides comprehensive guidance on how to effectively utilize your MIAP PRO 24, ensuring a seamless integration into your workflow or entertainment setup. Inside, you will find detailed instructions on setup, operation, and troubleshooting, alongside technical specifications to maximize the performance and enjoyment of your device. Our commitment is to enhance your experience with reliable, intuitive controls that elevate your projects and play to new heights.

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Technical Specifications

- Detailed specifications including dimensions, power requirements, connectivity options, and supported platforms.

Troubleshooting & Support

- Common issues and their solutions to help you resolve any problems quickly.
- **FAQs:** Answers to frequently asked questions about the MIAP PRO 24.
- Contact information for technical support, including email, phone, and online resources.
- **Online Resources:** Access to our online support portal and community forums.

Warranty and Customer Service

- Information on the warranty period, coverage details, and how to make a claim.
- Guidelines for contacting customer service for non-technical issues or inquiries.

This manual is designed to be a comprehensive resource, guiding you through every aspect of your MIAP PRO 24 experience. Whether you are setting up for the first time or seeking to resolve an issue, we are here to support your journey with the MIAP PRO 24.

Overview

The MIAP PRO 24 is designed to replicate some of the common intricate functionalities of an airplane cockpit, making it a useful tool for enthusiasts and professional pilots alike. By seamlessly integrating high-end electronics and user-centric features, it not only enhances the flight simulation experience but also provides practical training value in VR and pilot training environments. Here are its key attributes:

- **Cockpit Realism:** Equipped with quality electronics, the MIAP PRO 24 accurately simulates critical airplane cockpit functions, including Autopilot, navigation, and communications controls, offering users a more immersive flying experience.
- **Extensive Customization:** The controller allows for deep customization of button mappings, enabling tailoring the device to replicate the control schemes of specific aircraft models, thereby enhancing usability and operational fluency.
- **Robust Build Quality:** The MIAP PRO 24 is made from high-quality materials, designed to withstand rigorous use in demanding environments, ensuring longevity and consistent performance.
- **Direct Wired Connectivity:** Optimized for reliability and designed to be lightweight and portable, the MIAP PRO 24 features direct wired connections, eliminating the need for a battery and ensuring uninterrupted use without the necessity of recharging. This choice not only supports stable performance across PC, MAC, and Xbox platforms but also ensures seamless integration into any setup, bypassing the complications and limitations associated with wireless configurations.
- **VR Compatibility:** The design accommodates use in Virtual Reality settings, augmenting VR flight simulations with precise and intuitive control, for an unmatched level of immersion.
- **Firmware Upgrades:** Supported online firmware upgrades allow the MIAP PRO 24 to continually evolve, incorporating the latest features and enhancements to meet the ever-changing demands of flight simulation technology.

With its advanced capabilities, the MIAP PRO 24 is particularly favored for use with top-flight simulator games, including MSFS for PC and Xbox, X-Plane, and Aerofly FS2/4, among others. This ensures that users can engage with the most realistic flight scenarios available, making the MIAP PRO 24 a cornerstone of any flight simulation setup or pilot training program.



The MIAP flight panel is equipped with comprehensive control elements that bring a high level of immersion to flight simulation enthusiasts. It consists of the following components:

- **13 Primary Buttons:** These include momentary buttons that only activate while pressed, toggle buttons that switch between two states with each press, and shift buttons that, when held, modify the function of other buttons, akin to a Shift key on a keyboard.
- **X1 and X2 Buttons:** designed to greatly expand your control customization options within MSFS. These buttons do not perform any direct action on their own. Instead, they unlock a new layer of functionality when used in combination with other buttons, similar to how the Shift key works on a PC keyboard.
- **8 Multifunctional Rotary Knobs:** Each dial is not only rotatable to adjust various settings like altitude, heading, and radio frequencies but also incorporates a button feature. By pressing these knobs, users can execute momentary actions, toggle between two states, or shift the position of a digit, particularly useful for adjusting the ADF (Automatic Direction Finder) and transponder codes within the flight simulation.
- **Back-lit Panel:** The top panel features back-lighting which illuminates the labels for better visibility. Additionally, it includes function indicators that display the status of toggle and position shift buttons in various colors, providing visual feedback on active settings or modes.
- **Advanced frequency tuning:** The MIAP is equipped with an innovative frequency tuning button designed to streamline your cockpit management by enabling the tuning of both communication (COM) and navigation (NAV) frequencies. This button, in conjunction with a smart COM/NAV mode switch and a frequency range selector, offers a comprehensive solution for frequency management in your flight simulation.



- **Cooling Vents:** Located on the rear, these slots ensure proper ventilation to prevent overheating of the internal electronics. It is crucial that these are not obstructed to maintain optimal performance of the MIAP.
- **Reset Insert Hole:** This is a non-user-serviceable component and should not be used by the operator. It is intended for service technicians for resetting the device as part of maintenance or troubleshooting.
- **Mode Selection Button with LED Indicator:** Also on the rear, within a small hole, there's a button with an accompanying LED light. This light indicates the current operating mode of the MIAP: RED for Xbox mode and BLUE for PC mode. Users can switch between these modes by pressing the button with a suitable tool, such as a SIM card ejector pin, a toothpick or a small non-conductive probe.

With its tactile buttons and rotary knobs, the MIAP provides a tangible way to manage the autopilot, navigation, and communications aspects of flight, contributing to an immersive simulation experience.

Getting Started

Installation: Step-by-Step Guide to Setting Up Your MIAP PRO 24

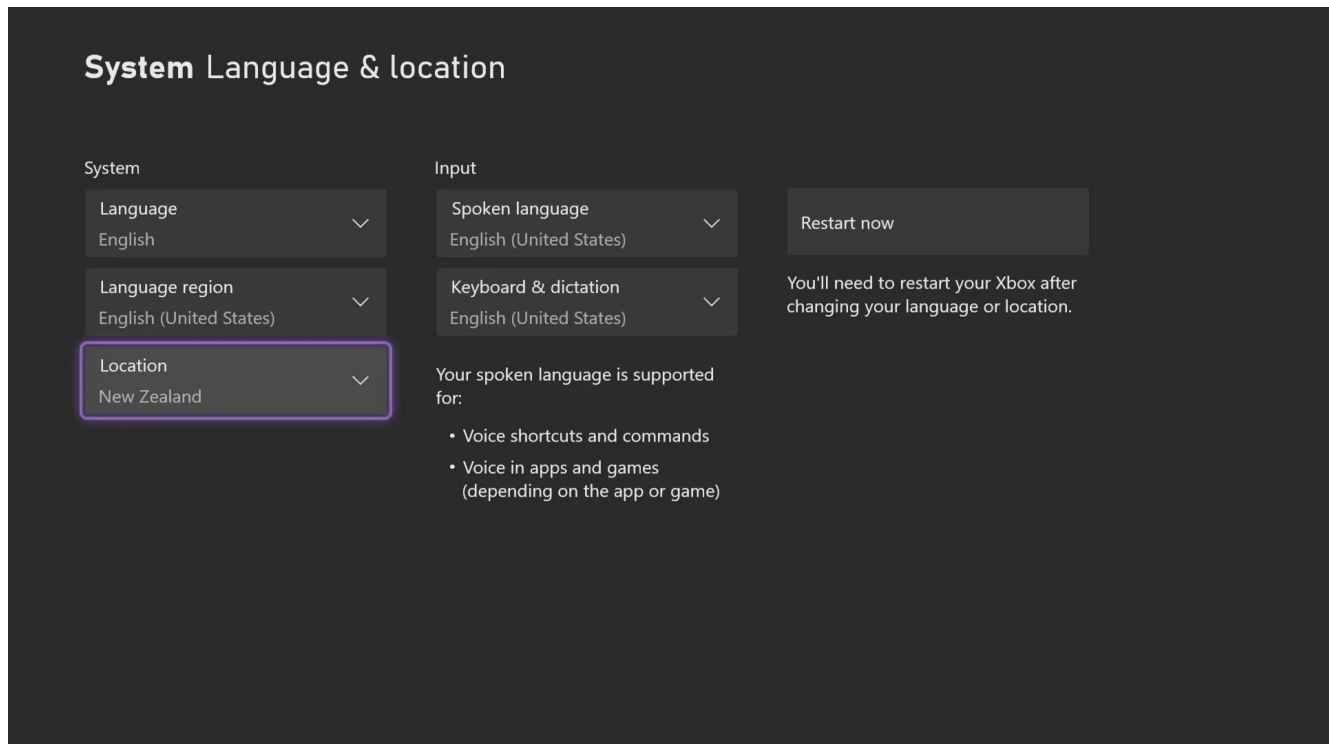
- 1. Prepare Your USB Type-C Data Cable:** To connect your MIAP PRO 24, you will need to provide your own USB 2 or 3 Type-C data cable. Ensure that the cable supports data transfer, not just charging, and is no longer than 3 meters to guarantee optimal performance.
- 2. Connect the MIAP PRO 24 to Your Device:** Connect one end of your USB Type-C data cable to the MIAP PRO 24 and the other end to a free USB port on your PC or Xbox. Make sure the connection is secure to prevent any disruptions during use.
- 3. Power Considerations:** After powering down, your PC may still supply power to the MIAP PRO 24, depending on its power sleep settings. For Xbox, currently, there is no option to set it into a power-off sleep mode which would turn off power to the USB ports. If a USB Hub is used make sure it is at least a USB 3 powered version.
- 4. Switching Between PC and Xbox Mode:** To switch between PC and Xbox modes on your MIAP PRO 24, locate the small hole on the rear of the device. Inside this hole, a LED light indicates the current mode: BLUE for PC and RED for Xbox. To change modes, power up the MIAP and gently press the button inside this hole using a toothpick, paperclip, or a SIM eject tool (the tool used to open a phone's SIM slot). Avoid using sharp objects to prevent damage. Note that on a PC, the MIAP will be recognized as a dedicated MIAP controller, while in Flight Simulator on Xbox, it functions as a keyboard. If a keyboard is already connected to your Xbox, the MIAP will integrate with it, appearing as a single keyboard in the MSFS control settings menu.
- 5. Initial Device Recognition:** On PC, the MIAP PRO 24 should automatically be recognized as a controller. For Xbox users, note that the MIAP acts as a keyboard, so it will not be identified as a separate controller device or acts as an extension to your existing keyboard or MILI23.
- 6. Configuration:** Launch your flight simulation software. You need to configure the control settings within your software to match the MIAP PRO 24's capabilities. On Xbox, if a keyboard is in use, the MIAP will integrate with it, showing only one keyboard in the MSFS control settings menu.
- 7. Button and Dial Assignment:** Before testing the controls, proceed to assign the buttons and dials according to your preference and the requirements of your flight simulation software. This customization is crucial for maximizing the MIAP PRO 24's functionality.

ASSIGNING

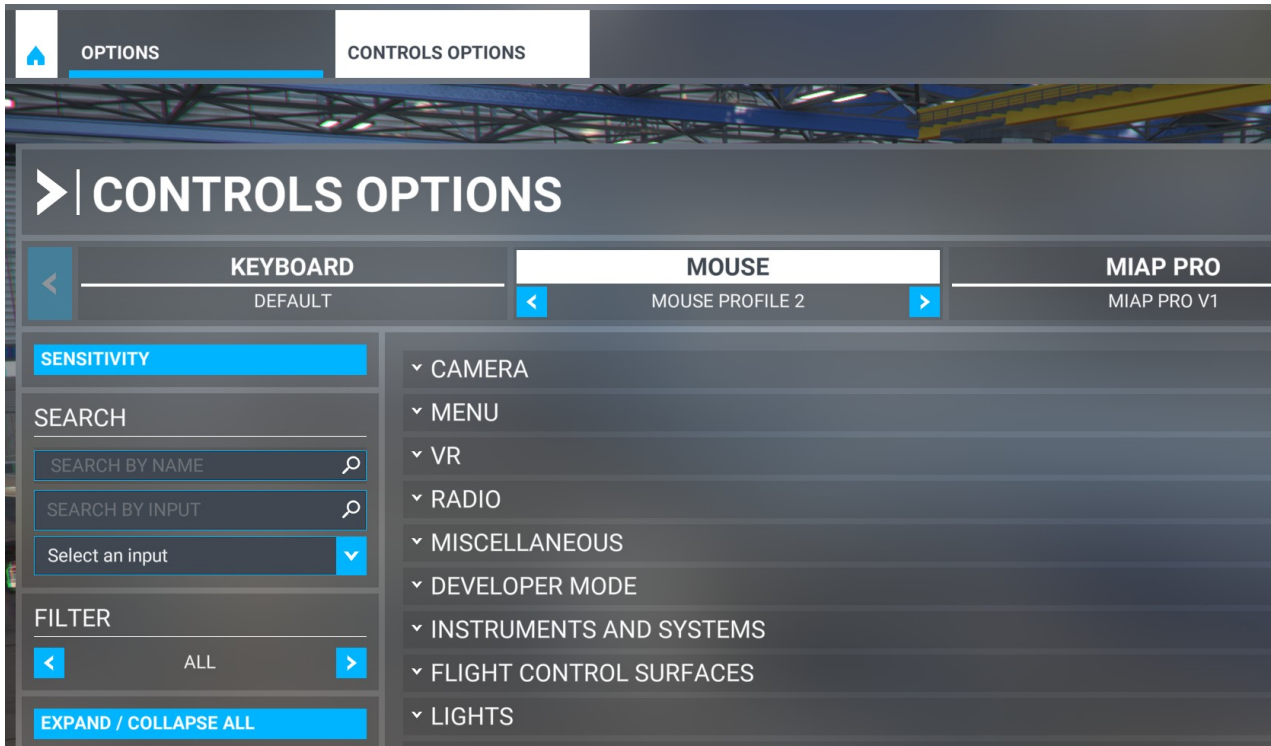
Assigning the Controller for Microsoft Flight Simulator 2020

Optimize your MIAP PRO 24 for a customized flying experience in Microsoft Flight Simulator 2020, whether you're navigating from a PC or Xbox. Follow these steps to assign controls effectively:

Important note: Ensure you have a US keyboard selected in the Xbox main settings menu.

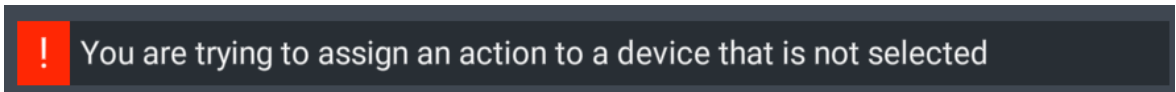


1. **Access Controls Options: From the main menu of Microsoft Flight Simulator 2020, select "OPTIONS," then "CONTROLS OPTIONS."**



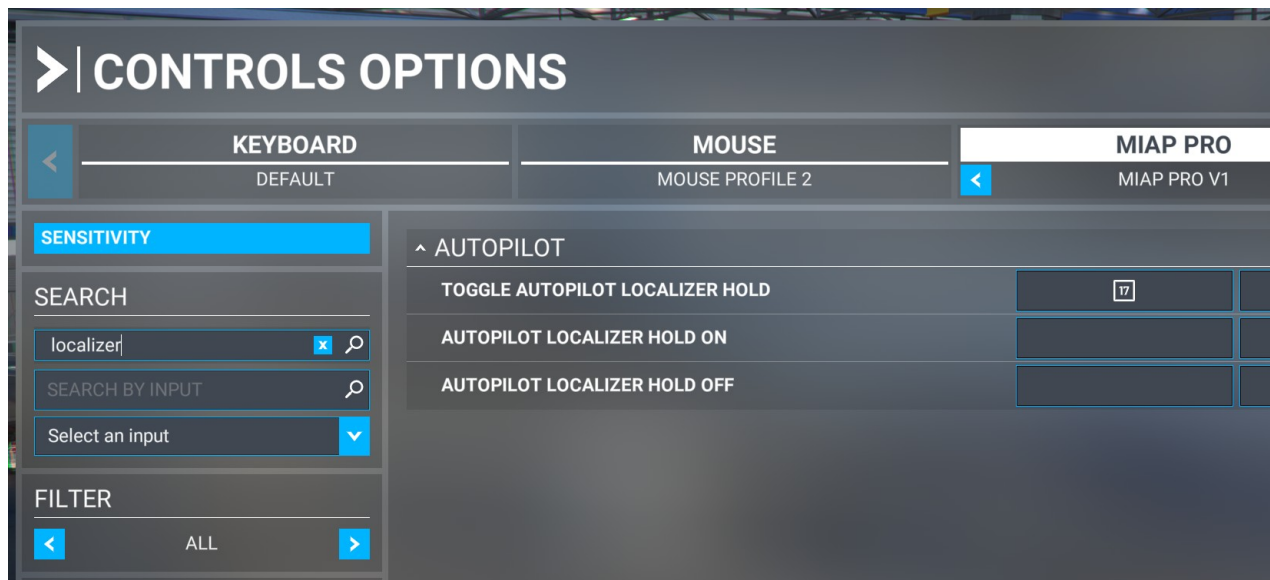
2. **Select Your MIAP PRO 24:**

- **On PC:** In the list of connected devices, find and select your MIAP PRO 24, which will be listed as 'MIAP PRO'. Ensure the tab for the MIAP PRO is selected and shown white, indicating it is selected and active for assigning. If not selected, you may see a message indicating a controller is attempting to be assigned which is not active.



- **On Xbox:** Make sure to select the keyboard profile, as the MIAP PRO will not be separately listed as controller. The same indication of selection applies – the tab must be white to confirm it's ready for assignments.
- **Select Profile:** Below the Keyboard text or MIAP PRO controller name select a profile you would like to use or create a new profile by clicking on 'open preset manager' at the bottom of the page. To add the MIAP PRO 24 functions to the default profile is recommended especially for new users.

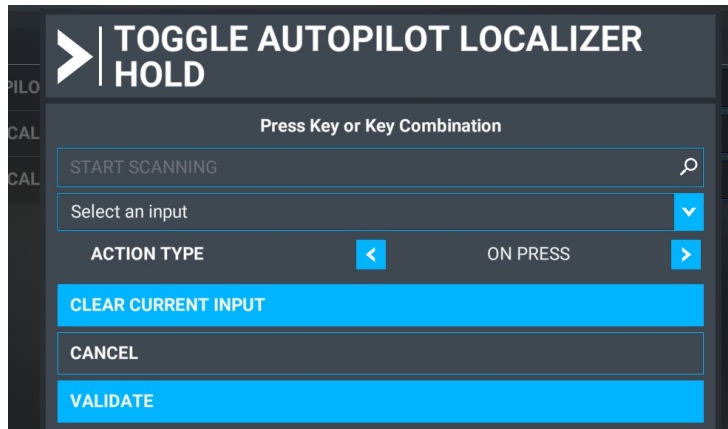
3. **Search for Commands:** Choose from or search the list of actions you want to assign, for instance 'LOCALIZER'



Note: Whether searching or scrolling through the command list, ensure the filter on the left side is set to ALL to display all possible functions. This step is crucial for finding the action you wish to assign to a button on your MIAP PRO 24.

4. Assigning Actions:

- Click on the action you desire to assign for instance 'TOGGLE AUTOPILOT LOCALIZER HOLD',
- then click in the first or second window next to the function's name to initiate the assignment.



- A window will pop up asking to "Press Key or Key Combination." Click in the tab which says 'START SCANNING'
 - **For PC:** Press the button on your MIAP PRO 24 that you wish to assign. Microsoft Flight Simulator 2020 will detect and list the button numbers pressed.
 - **For Xbox:** Press the button you wish to assign using the MIAP PRO 24, acting as a keyboard. The simulator will detect and register the key combination.
 - **Validate:** After Microsoft Flight Simulator 2020 correctly recognizes the input, press "Validate" to confirm your assignment. If the scanned input does not match the intended joystick button numbers or key combination, repeat the scanning process until the correct input is displayed. Then, continue this method for all the functions you wish to assign to your MIAP PRO 24, securing a personalized control setup. It's important to save your profile upon completing the assignments to preserve your configuration.
5. **Return to Game:** Now that your MIAP PRO 24 is configured with your preferred settings, you're all set to engage in the immersive world of Microsoft Flight Simulator 2020 with enhanced control and precision.

Coming Soon

- **Assigning for X-Plane**
- **Assigning for Aerofly FS2/4**

Initial suggested Button Assignment MSFS for PC & Xbox

Welcome to your MIAP PRO 24 setup guide. As you customize your control profile, please keep in mind the unique aspects of MSFS and how they impact your experience.

Key Considerations:

- **Functionality and Compatibility:** The integration and operability of control settings within MSFS, for both original and third-party aircraft, are determined by Microsoft. This integration influences the availability and functionality of specific cockpit controls and key bindings. A notable limitation is that some controls might lack assignable keys by default, impacting both the original aircraft provided by MSFS and third-party additions. This scenario is outside our direct control and applies broadly across the MSFS ecosystem.
- **Multiple Functions per Key:** In rare cases, a single press of a button may trigger multiple functions simultaneously. This issue, unique to MSFS, can lead to unexpected and undesired behavior during simulations. It's crucial to recognize that this is neither a designed feature of MSFS nor a flaw in the MIAP PRO 24 hardware, but rather an unforeseen complication within the flight simulation software itself.

Our Commitment to Support:

We aim to provide comprehensive support within these constraints, leveraging our expertise in MSFS to enhance your MIAP PRO 24 experience. Although certain aspects, like key bindings' dual functionality and third-party aircraft support, are beyond our direct control, we are here to guide and assist you in trying to navigate complexities.

NORMAL BUTTONS

ARMING THE AUTO THROTTLE
DISCONNECTING THE AUTO THROTTLE
TO/GA (TAKEOFF/GO-AROUND) MODE
AUTOPILOT ENGAGE/DISENGAGE
RADIO ALTITUDE MODE
AUTOPILOT AIRSPEED HOLD
TOGGLE AUTOPILOT HEADING HOLD
TOGGLE AUTOPILOT ALTITUDE HOLD
VERTICAL SPEED MODE (NORMAL BUTTON)
FLIGHT DIRECTOR
FLIGHT DIRECTOR SYNC
AUTOPILOT LOCALIZER HOLD
TOGGLE AUTOPILOT APPROACH HOLD

SPECIAL BUTTONS

SHIFT BUTTONS X1 & X2

ROTARY BUTTONS

AUTOPILOT AIRSPEED ACQUIRE
HEADING SET
HEADING ADJUST
ALTIMETER SET TO MSL PRESSURE
VERTICAL SPEED SET

DIALS

VOR DIAL
AIRSPEED DIAL
HDG DIAL
ALTITUDE DIAL
VERTICAL SPEED DIAL

FREQUENCIES TUNING
COM/NAV MODE TOGGLE
FREQ ROTARY BUTTON
SWAP FREQUENCIES

AUTOMATIC DIRECTION FINDER (ADF)

TRANSPONDER (XPDR)

Microsoft Flight simulator known limitations

ARMING THE AUTO THROTTLE (SHORT PRESS)



- **How:** This normal button acts as a toggle switch when short pressed.
- **What it does:** Arms the autothrottle system, preparing it to automatically control the aircraft's engine power to maintain the set speed or altitude. The autothrottle is essential during takeoff, cruise, and landing phases for managing engine thrust, thereby ensuring that the aircraft operates within safe speed limits. Engaging this function simplifies throttle management, especially during critical flight segments.
- **Search Term:** ARM AUTO THROTTLE
- **Scan Result:**
 - **PC:** 1
 - **Xbox:** r + LEFT_SHIFT
- **Indication:** Blue light signifies activation

DISCONNECTING THE AUTO THROTTLE (SHORT PRESS)

- **How:** This normal button serves as a toggle when short pressed.
- **What it does:** Disengages the autothrottle system, allowing the pilot to manually control engine thrust. This function is crucial when pilots need direct control over the aircraft's speed, such as during manual approaches or in response to specific flight conditions where automated throttle management may not be ideal.
- **Search Term:** AUTOTHROTTLE DISCONNECT
- **Scan Result:**
 - **PC:** 2
 - **Xbox:**] + LEFT_ALT + RIGHT_ALT
- **Indication:** Red light indicates deactivation

TO/GA (TAKEOFF/GO-AROUND) MODE (LONG PRESS)

- **How:** Activates the takeoff/go-around mode when the button is long pressed.
- **What it does:** Instructs the autothrottle to apply maximum allowable thrust to support either takeoff or a go-around procedure. This mode is used during takeoff to ensure optimal thrust is achieved for lift-off and during missed approaches to quickly increase altitude and position the aircraft for another approach attempt. The TO/GA mode is a critical feature for enhancing flight safety during these phases.
- **Search Term:** TO/GA
- **Scan Result:**
 - **PC:** 39
 - **Xbox:** g + LEFT_SHIFT + LEFT_CTRL

AUTOPILOT ENGAGE/DISENGAGE (SHORT PRESS)



- **How:** This button toggles the autopilot system on or off with a short press.
- **What it does:** Engages or disengages the aircraft's autopilot, transferring control between the pilot and the aircraft's automated systems. When activated, the autopilot can maintain a set course, altitude, and speed, according to pre-programmed parameters or pilot inputs. This function reduces pilot workload during non-critical flight phases and ensures stable flight.
- **Search Term:** TOGGLE AUTOPILOT MASTER
- **Scan Result:**
 - **PC:** 3
 - **Xbox:** z

RADIO ALTITUDE MODE (LONG PRESS)

- **How:** Activates the radio altitude mode for the autopilot when the button is long pressed.
- **What it does:** Switches the autopilot's altitude reference from barometric to radio altitude, which measures the aircraft's height above the ground directly below it. This mode is particularly useful for low-altitude operations, such as approaches and landings, providing precise altitude control to ensure safe clearance from terrain and obstacles.
- **Search Term:** TOGGLE AUTOPILOT RADIO ALTITUDE MODE
- **Scan Result:**
 - **PC:** 4
 - **Xbox:** F13 + RIGHT_ALT

AUTOPILOT AIRSPEED HOLD (SHORT PRESS)



- **How:** Activates the true airspeed calculator when the button is long pressed.
- **What it does:** Engages the autopilot system to maintain the current speed of the aircraft as the target airspeed. This function is essential for managing the aircraft's speed efficiently without manual adjustments, stabilizing the flight and relieving the pilot of constant speed monitoring duties. It ensures that the aircraft adheres to the set speed, critical for various flight phases and adherence to air traffic control instructions.
- **Search Term:** SET AUTOPILOT AIRSPEED HOLD
- **Scan Result:**
 - **PC:** 5
 - **Xbox:** F13 + LEFT_SHIFT + LEFT_CTRL

SET TRUE AIRSPEED CALCULATOR (LONG PRESS)

- **How:** Activates the true airspeed calculator when the button is long pressed.
- **What it does:** Adjusts the aircraft's true airspeed setting, which is the airspeed relative to undisturbed air, corrected for temperature and altitude. This is crucial for accurate speed control, especially during high-altitude flight or in varying atmospheric conditions, ensuring the autopilot maintains the correct speed for efficiency and safety.
- **Search Term:** SET TRUE AIRSPEED CALCULATOR
- **Scan Result:**
 - **PC:** 6
 - **Xbox:** F13 + LEFT_SHIFT + LEFT_ALT

TOGGLE AUTOPILOT HEADING HOLD (SHORT PRESS)



- **How:** This normal button toggles the autopilot's heading hold function with a short press.
- **What it does:** Engages the autopilot to maintain the current heading, using aircraft's ailerons to keep the set directional course. This function is used to stabilize the flight path without manually adjusting the heading, particularly useful in maintaining a straight route or when preparing for approach patterns.
- **Search Term:** TOGGLE AUTOPILOT HEADING HOLD
- **Scan Result:**
 - **PC:** 7
 - **Xbox:** F13 + LEFT_SHIFT + RIGHT_ALT

TOGGLE AUTOPILOT ALTITUDE HOLD (SHORT PRESS)



- **How:** Engages the altitude hold function with a short press.
- **What it does:** Commands the autopilot to maintain the current altitude, adjusting pitch as necessary. This feature is essential for level flight operations, allowing the pilot to focus on other aspects of flight management by ensuring stable altitude without manual input.
- **Search Term:** TOGGLE AUTOPILOT ALTITUDE HOLD
- **Scan Result:**
 - **PC:** 9
 - **Xbox:** F13 + LEFT_CTRL + RIGHT_ALT

TOGGLE AUTOPILOT RADIO ALTITUDE MODE (LONG PRESS)

- **How:** Pressing this button toggles between the radio and baro ltitude mode for the autopilot.
- **What it does:** Shifts the autopilot's altitude reference to radio altitude, providing altitude measurements based on the distance to the ground directly below, which is invaluable for approach and landing phases, especially in complex terrain or when performing low-altitude maneuvers. Pressing the buttons again reverts back to Barometric altitude.
- **Search Term:** TOGGLE AUTOPILOT RADIO ALTITUDE MODE
- **Scan Result:**
 - **PC:** 10
 - **Xbox:** F13 + LEFT_ALT + RIGHT_ALT

VERTICAL SPEED MODE (NORMAL BUTTON)



- **How:** Activates the vertical speed hold mode for the autopilot when the button is pressed.
- **What it does:** This action enables the pilot to set a specific climb or descent rate (vertical speed) that the autopilot will maintain. Adjusting vertical speed is crucial for controlled ascent or descent to reach a desired altitude by a specific point or to comply with air traffic control instructions without changing the aircraft's airspeed.
- **Search Term:** TOGGLE AUTOPILOT VS HOLD
- **Scan Result:**
 - **PC:** 11
 - **Xbox:** F13 + LEFT_SHIFT

FLIGHT DIRECTOR (SHORT PRESS)



- **How:** Toggles the flight director on or off with a short press.
- **What it does:** The flight director system provides guidance to the pilot for aircraft attitude adjustments to follow the commanded autopilot flight path without the autopilot being engaged. It's an essential aid for manual flying, giving visual cues on the primary flight display to achieve or maintain the set course, altitude, or approach profile.
- **Search Term:** TOGGLE FLIGHT DIRECTOR
- **Scan Result:**
 - **PC:** 13
 - **Xbox:** f + LEFT_CTRL

FLIGHT DIRECTOR PITCH SYNC (LONG PRESS)

- **How:** Synchronizes the flight director's pitch reference with the current aircraft pitch when the button is long pressed.
- **What it does:** This function aligns the flight director bars to the current pitch attitude of the aircraft, allowing the pilot to reset the flight director's guidance cues to the existing flight conditions. It's particularly useful for recalibrating the flight director during or after manual maneuvers to ensure accurate guidance.
- **Search Term:** FLIGHT DIRECTOR PITCH SYNC
- **Scan Result:**
 - **PC:** 14
 - **Xbox:** F14 + RIGHT_ALT

FLIGHT DIRECTOR (SHORT PRESS)



- **How:** Engages the autopilot NAV1 hold function with a short press.
- **What it does:** Commands the autopilot to use the NAV1 radio for navigation, holding the course to or from the selected VOR or ILS beacon. This mode is vital for precision navigation along airways or during instrument approaches, ensuring the aircraft follows the designated flight path based on radio navigation signals.
- **Search Term:** AUTOPILOT NAV1 HOLD
- **Scan Result:**
 - **PC:** 15
 - **Xbox:** n + LEFT_CTRL
-

TOGGLE GPS DRIVES NAV1 (LONG PRESS)

- **How:** Switches the NAV1 source between traditional navigation and GPS with a long press.
- **What it does:** Allows the pilot to toggle the input source for the NAV1 instrument between ground-based navigation aids and GPS signals. This flexibility enables the use of GPS precision for en-route navigation or approaches when available and switching back to VOR/ILS as required by the flight plan or for redundancy.
- **Search Term:** TOGGLE GPS DRIVES NAV1
- **Scan Result:**
 - **PC:** 16
 - **Xbox:** F14 + LEFT_SHIFT + LEFT_ALT

AUTOPILOT LOCALIZER HOLD (SHORT PRESS)



- **How:** Activates the autopilot localizer hold mode with a short press.
- **What it does:** Engages the autopilot to lock onto and follow the localizer signal for an ILS approach, aligning the aircraft with the runway centerline during the approach phase. This function is crucial for achieving precise lateral alignment in low-visibility conditions or when precision landing is necessary.
- **Search Term:** TOGGLE AUTOPILOT LOCALIZER HOLD
- **Scan Result:**
 - **PC:** 17
 - **Xbox:** o + LEFT_CTRL

TOGGLE AUTOPILOT APPROACH HOLD (SHORT PRESS)



- **How:** Activates the autopilot approach hold mode with a short press.
- **What it does:** Engages the autopilot to automatically guide the aircraft during an instrument approach, using navigation aids to align with the runway and maintain the correct descent path. This mode is crucial for executing precise approaches, especially in poor weather conditions or when precision landing is necessary.
- **Search Term:** TOGGLE AUTOPILOT APPROACH HOLD
- **Scan Result:**
 - **PC:** 19
 - **Xbox:** a + LEFT_CTRL

Enhancing Your Control with X1 and X2 Buttons on the MIAP

Functionality of X1 and X2 Buttons:

- **On Xbox:** Pressing either X1 or X2 acts as a modifier. This means that when you hold down X1 or X2 and then press another button, a different, predefined action is triggered. This allows you to effectively double the number of functions that can be assigned to the buttons on your MIAP, enabling complex input combinations without the need for additional hardware buttons.
- **On PC:** Similarly, pressing X1 or X2 generates a specific key press. Holding down this key (modifier) and simultaneously pressing another button on the MIAP will trigger an alternative action assigned to that combination. This multiplies your configuration possibilities, allowing for a more nuanced and personalized flight simulation experience.

How to Use:

1. **Press and Hold X1 or X2:** Start by pressing and holding either the X1 or X2 button. This action "activates" the modifier state.
2. **Press Another Button:** While holding down the modifier (X1 or X2), press another button on your MIAP. The combination of these inputs will perform a different function than pressing the buttons individually.
3. **Create Custom Combinations:** Utilize the MIAP configuration software or MSFS's in-game settings to assign specific actions to these new combinations, enhancing your control setup. For example, a button normally assigned to "NAV1" could be set to trigger "NAV2" when pressed in conjunction with the X1 or X2 modifier.

Advantages:

- **Increased Customization:** Effortlessly double your control inputs, allowing for a more complex and tailored flight simulation setup.
- **Efficient Use of Space:** Maximize the functionality of your MIAP without the need for additional physical buttons.
- **Flexibility:** Adapt your control scheme to fit various aircraft and simulation scenarios, all while maintaining a streamlined and intuitive interface.

Remember, MSFS supports button and key combinations, providing a flexible platform for you to explore the full potential of your MIAP's controls. Experiment with different configurations to find the setup that best suits your flight style and preferences.

SHIFT BUTTON X1 (SHORT PRESS)



- **How:** Activates a shift function or mode when the button is short pressed.
- **What it does:** The specific function of "SHIFT button 1" is not detailed, but generally, a shift button temporarily changes the mode of other buttons, allowing a secondary function to be executed. This is akin to the Shift key on a keyboard, providing access to additional commands or features.
- **Search Term:** Not applicable.
- **Scan Result:**
 - **PC:** 21
 - **Xbox:** RIGHT_CTRL (Modifier)

SHIFT BUTTON X2 (SHORT PRESS)



- **How:** Activates an alternative shift function or mode with a short press.
- **What it does:** Similar to "SHIFT button 1," the exact purpose of "SHIFT Button 2" is not described, suggesting it provides another layer of functionality to buttons, potentially offering different secondary functions compared to the first shift button.
- **Search Term:** Not applicable.
- **Scan Result:**
 - **PC:** 23
 - **Xbox:** RIGHT_SHIFT (Modifier)

CRS (VOR1 MODE) IDENTIFIER ENABLE/DISABLE (ROTARY BUTTON, SHORT/LONG PRESS)



- **How:** Short press to enable and long press to disable the VOR1 identifier.
- **What it does:** Controls the audible Morse code identifier for VOR1, allowing pilots to verify they are tuned to the correct VOR station by enabling or disabling the station's identifier broadcast. This feature is crucial for navigation accuracy, especially in congested airspace or when visual references are limited.
- **Search Term:** ENABLE/DISABLE VOR 1 IDENTIFIER
- **Scan Result:**
 - **PC:** 27 (Enable), 28 (Disable)
 - **Xbox:** F14 + LEFT_SHIFT (Enable), F14 + LEFT_CTRL (Disable)

CRS (VOR2 MODE) IDENTIFIER ENABLE/DISABLE (ROTARY BUTTON, SHORT/LONG PRESS)

- **How:** Short press to enable and long press to disable the VOR2 identifier.
- **What it does:** Functions similarly to the CRS (VOR1 flag) identifier control, this time for VOR2, allowing pilots to verify the correct tuning to a secondary VOR station. This enhances navigational redundancy and precision, ensuring pilots can rely on accurate VOR signals for course setting and adjustments.
- **Search Term:** ENABLE/DISABLE VOR 2 IDENTIFIER
- **Scan Result:**
 - **PC:** 29 (Enable), 30 (Disable)
 - **Xbox:** F14 + LEFT_ALT (Enable), F14 + LEFT_SHIFT + RIGHT_ALT (Disable)

AUTOPILOT AIRSPEED ACQUIRE (ROTARY BUTTON, SHORT PRESS)



- **How:** Short press to activate the autopilot airspeed acquire function.
- **What it does:** Commands the autopilot to capture and maintain the current airspeed, adjusting throttle as necessary to keep the speed constant. This function is essential for managing speed during various flight phases, especially when transitioning between climb, cruise, and descent, allowing for smoother flight operations and adherence to speed restrictions.
- **Search Term:** AUTOPILOT AIRSPEED ACQUIRE
- **Scan Result:**
 - **PC:** 31
 - **Xbox:** F14 + LEFT_CTRL + RIGHT_ALT.

HEADING SET (ROTARY BUTTON, SHORT PRESS)



- **How:** Sets the autopilot heading to the current aircraft heading when the button is short pressed.
- **What it does:** This function aligns the autopilot's heading bug with the aircraft's current heading, simplifying the process of setting a new course direction. It's particularly useful for quickly updating the autopilot's target heading to match the desired flight path without manually adjusting the heading selector.
- **Search Term:** SET HEADING INDICATOR
- **Scan Result:**
 - **PC:** 33
 - **Xbox:** / + LEFT_CTRL + RIGHT_ALT

ALTIMETER SET TO MSL PRESSURE (ROTARY BUTTON, LONG PRESS)



- **How:** Adjusts the altimeter setting to mean sea level (MSL) pressure with a long press.
- **What it does:** This function recalibrates the altimeter to the standard atmospheric pressure at sea level, ensuring accurate altitude readings. It's crucial for flights transitioning between areas with varying atmospheric pressures, maintaining the reliability of altitude information.
- **Search Term:** SET ALTIMETER TO MSL PRESSURE
- **Scan Result:**
 - **PC:** 36
 - **Xbox:**] + LEFT_SHIFT + LEFT_ALT

VERTICAL SPEED SET (ROTARY BUTTON, SHORT PRESS)



- **How:** Sets the autopilot's vertical speed to the current rate of climb or descent with a short press.
- **What it does:** Enables the autopilot to maintain the current vertical speed, useful for stabilizing the climb or descent rate. This function aids in managing the aircraft's ascent or descent to reach a targeted altitude efficiently.
- **Search Term:** SET AUTOPILOT CURRENT VS
- **Scan Result:**
 - **PC:** 37
 - **Xbox:**] + LEFT_SHIFT + RIGHT_ALT

VOR DIAL



DECREASE VOR1 OBS (ROTARY DIAL, ROTATE CCW)

- **How:** Decreases the VOR1 OBS (Omni Bearing Selector) setting when the dial is rotated counterclockwise and the VOR-1 mode is set.
- **What it does:** Adjusts the VOR1 OBS setting to a lower value, changing the radial that the navigation system uses to interpret the VOR signal. This is crucial for navigation and approach procedures, allowing pilots to align the aircraft with specific VOR radials for accurate course tracking.
- **Search Term:** DECREASE VOR1 OBS
- **Scan Result:**
 - **PC:** 40
 - **Xbox:** / + LEFT_SHIFT

INCREASE VOR1 OBS (ROTARY DIAL, ROTATE CW)

- **How:** Increases the VOR1 OBS setting when the dial is rotated clockwise and the VOR-1 mode is set.
- **What it does:** Adjusts the VOR1 OBS setting to a higher value, enabling the pilot to select a new radial for navigation via VOR signals. This facilitates course adjustments and navigation to or from a VOR station, essential for route planning and execution.
- **Search Term:** INCREASE VOR1 OBS
- **Scan Result:**
 - **PC:** 41
 - **Xbox:** / + LEFT_CTRL

DECREASE VOR2 OBS (ROTARY DIAL, ROTATE CCW)

- **How:** Decreases the VOR2 OBS setting with a counterclockwise rotation and the VOR-2 mode is set.
- **What it does:** Similar to the VOR1 OBS adjustment, this action decreases the VOR2 OBS setting, allowing the navigation system to use a lower radial value for VOR2 signals. It's used when navigating using a secondary VOR, providing flexibility and redundancy in navigation.
- **Search Term:** DECREASE VOR2 OBS
- **Scan Result:**
 - **PC:** 42
 - **Xbox:** / + LEFT_ALT

INCREASE VOR2 OBS (ROTARY DIAL, ROTATE CW)

- **How:** Increases the VOR2 OBS setting with a clockwise rotation and the VOR-2 mode is set.
- **What it does:** This function increases the VOR2 OBS setting, changing the radial used by the navigation system for VOR2 signal interpretation. It enhances navigation options, allowing for precise adjustments to the aircraft's course using secondary VOR signals.
- **Search Term:** INCREASE VOR2 OBS
- **Scan Result:**
 - **PC:** 43
 - **Xbox:** / + RIGHT_ALT

AIRSPEED DIAL

DECREASE AUTOPILOT REFERENCE AIRSPEED (ROTARY DIAL, ROTATE CCW)



- **How:** Decreases the autopilot's reference airspeed when the dial is rotated clockwise.
- **What it does:** This function allows the pilot to adjust the target airspeed for the autopilot to maintain. Increasing the reference airspeed is crucial during phases like climb or when accelerating to cruise speed, ensuring the autopilot adjusts throttle settings to achieve and maintain the desired speed efficiently.
- **Search Term:** DECREASE AUTOPILOT REFERENCE AIRSPEED
- **Scan Result:**
 - **PC:** 44
 - **Xbox:** delete + LEFT_SHIFT + LEFT_CTRL

INCREASE AUTOPILOT REFERENCE AIRSPEED (ROTARY DIAL, ROTATE CW)

- **How:** Increases the autopilot's reference airspeed when the dial is rotated clockwise.
- **What it does:** This function allows the pilot to adjust the target airspeed for the autopilot to maintain. Increasing the reference airspeed is crucial during phases like climb or when accelerating to cruise speed, ensuring the autopilot adjusts throttle settings to achieve and maintain the desired speed efficiently.
- **Search Term:** INCREASE AUTOPILOT REFERENCE AIRSPEED
- **Scan Result:**
 - **PC:** 45
 - **Xbox:** Insert + LEFT_SHIFT + LEFT_CTRL

HEADING DIAL



DECREASE HEADING BUG (ROTARY DIAL, ROTATE CCW)

- **How:** Decreases the heading bug setting when the dial is rotated counterclockwise.
- **What it does:** Adjusting the heading bug to a lower setting allows the pilot to change the aircraft's intended direction of flight. This is particularly useful for navigation adjustments or when aligning the aircraft with a runway or navigational aid.
- **Search Term:** DECREASE HEADING BUG
- **Scan Result:**
 - **PC:** 46
 - **Xbox:** Delete + LEFT_CTRL

INCREASE HEADING BUG (ROTARY DIAL, ROTATE CW)

- **How:** Increases the heading bug setting when the dial is rotated clockwise.
- **What it does:** This operation raises the heading bug setting, directing the autopilot to adjust the aircraft's heading to a higher value. It's used for course corrections, aligning with navigational paths, or preparing for approach procedures.
- **Search Term:** INCREASE HEADING BUG
- **Scan Result:**
 - **PC:** 47
 - **Xbox:** Insert + LEFT_CTRL

ALTITUDE DIAL



DECREASE AUTOPILOT REFERENCE ALTITUDE (ROTARY DIAL, ROTATE CCW)

- **How:** Lowers the autopilot's reference altitude when the dial is rotated counterclockwise.
- **What it does:** The pilot can reduce the target altitude for the autopilot, instructing it to descend to a lower flight level. This function is essential for step-down approaches, altitude deconfliction, or preparing for descent and landing.
- **Search Term:** DECREASE AUTOPILOT REFERENCE ALTITUDE
- **Scan Result:**
 - **PC:** 48
 - **Xbox:** Page Down + LEFT_CTRL

INCREASE AUTOPILOT REFERENCE ALTITUDE (ROTARY DIAL, ROTATE CW)

- **How:** Raises the autopilot's reference altitude when the dial is rotated clockwise.
- **What it does:** Enables the pilot to set a higher target altitude for the autopilot, facilitating climbs to new cruising levels or altitude adjustments during flight. This is critical for compliance with ATC instructions or navigating through varied terrain.
- **Search Term:** INCREASE AUTOPILOT REFERENCE ALTITUDE
- **Scan Result:**
 - **PC:** 49
 - **Xbox:** Page Up + LEFT_CTRL

VERTICAL SPEED DIAL



DECREASE AUTOPILOT REFERENCE VS (ROTARY DIAL, ROTATE CCW)

- **How:** Increases the autopilot's vertical speed reference when the dial is rotated clockwise.
- **What it does:** Allows the pilot to specify a higher vertical speed for the autopilot to maintain, aiding in a more rapid ascent or descent. This control is essential for managing climb and descent rates effectively, ensuring adherence to flight plans or ATC instructions while maintaining passenger comfort and safety.
- **Search Term:** DECREASE AUTOPILOT REFERENCE VS
- **Scan Result:**
 - **PC:** 50
 - **Xbox:** End + LEFT_CTRL

INCREASE AUTOPILOT REFERENCE VS (ROTARY DIAL, ROTATE CW)

- **How:** Increases the autopilot's vertical speed reference when the dial is rotated clockwise.
- **What it does:** Allows the pilot to specify a higher vertical speed for the autopilot to maintain, aiding in a more rapid ascent or descent. This control is essential for managing climb and descent rates effectively, ensuring adherence to flight plans or ATC instructions while maintaining passenger comfort and safety.
- **Search Term:** INCREASE AUTOPILOT REFERENCE VS
- **Scan Result:**
 - **PC:** 51
 - **Xbox:** Home + LEFT_CTRL

Mastering the Frequency Tuning Button on the MIAP

COM/NAV Mode Switch:

- **Operation:** A physical switch toggles between COM and NAV modes, allowing you to decide whether you're adjusting communication or navigation frequencies.
- **Indicator:** The mode is clearly indicated by a colored LED—Green for COM mode and Orange for NAV mode—ensuring you always know which frequency type you are controlling.

Frequency Range Selection:

- **How to Select:** By pressing the top of the frequency tuning dial, you can switch between tuning in Megahertz (MHz) and Kilohertz (KHz).
- **Visual Indicator:** The current tuning mode (MHz or KHz) is highlighted in orange text, providing clear feedback on your selection.

Frequency Swap Button:

- **Functionality:** The swap button functionality adapts based on the COM/NAV mode. It allows you to swap between active and standby frequencies for either COM or NAV, depending on the selected mode.

Enhanced Tuning with X1 and X2 Modifiers:

- **Extended Controls:** Utilize the X1 or X2 buttons as modifiers (function doublers) to access additional frequency management options, such as tuning COM2 and NAV2 frequencies. This expands your control capabilities without the need for extra buttons or switches.
- **Efficiency and Flexibility:** These modifiers not only double the functionality of your frequency tuning button but also ensure that your setup remains efficient and adaptable to various flying conditions and requirements.

Advantages of the Integrated System:

- **Unified Control:** Manage all your communication and navigation frequency adjustments through a single button, reducing the need for multiple controls and streamlining cockpit management.
- **Intuitive Operation:** The clear visual indicators and logical switch placements make it easy to switch between modes and frequency types, enhancing your situational awareness and operational efficiency.
- **Customizable Functionality:** With the addition of the X1 and X2 modifiers, you gain a level of customization and control depth that allows for a tailored flying experience, accommodating both basic and complex flight operations.

COM/NAV MODE TOGGLE



- **How:** Toggles between communication and navigation modes with a short press.
- **What it does:** This action toggles the primary function of the control panel between COM (communication frequencies) and NAV (navigation frequencies), enabling the pilot to quickly change between controlling radio communications and navigation aids.
- **Search Term:** Not applicable as specific MSFS function not needed to be assigned.
- **Scan Result:** Not applicable
- **Indication:** GREEN light indicates COM mode selected, ORANGE indicates NAV mode select

FREQ (ROTARY BUTTON, SHORT PRESS)



- **How:** Toggles between MHz and kHz frequency bands when the button is short pressed.
- **What it does:** This action switches the frequency adjustment granularity for communication or navigation systems between whole MHz and fractional kHz, providing precise control over frequency selection. It's vital for tuning into the correct communication channels or navigation beacons, especially in congested airspaces or when operating on specific procedural frequencies.
- **Search Term:** Not specified (Action might be inherent to the device and not mapped in MSFS)
- **Scan Result:**
 - **PC:** Not applicable
 - **Xbox:** Not applicable
- **Indication:** Either MHZ or KZH lights up depending on the mode

SWAP (SHORT PRESS)



- How
:

Swaps the active and standby frequencies on COM1 or NAV1 depending the **COM/NAV MODE TOGGLE** switch mode selected.

- **What it does:** Allows the pilot to quickly switch between the currently active communication or navigation frequency and a pre-selected standby frequency on the COM1/NAV1 radio, ensuring seamless communication with air traffic control or other entities without manually dialing frequencies.
- **Search Term:** COM1 SWAP
- **Scan Result:**
 - **PC:** 25
 - **Xbox:** F13 + LEFT_CTRL
- **Search Term:** NAV1 SWAP
- **Scan Result:**
 - **PC:** 26
 - **Xbox:** n + LEFT_CTRL + LEFT_SHIFT

DECREASE COM1 (WHOLE) (ROTARY DIAL, ROTATE CCW)

- **How:** Decreases the COM1 frequency by whole MHz when the dial is rotated counterclockwise. COM/NAV in COM and MHZ selected
- **What it does:** Reduces the primary communication channel's frequency in significant increments, allowing for rapid adjustments to the COM1 radio frequency. This functionality is crucial for quick frequency changes to maintain communication with air traffic control or other aircraft.
- **Search Term:** DECREASE COM1 (WHOLE)
- **Scan Result:**
 - **PC:** 60
 - **Xbox:** \ + LEFT_ALT
- **Indication:** MHz Blue & COM green

INCREASE COM1 (WHOLE) (ROTARY DIAL, ROTATE CW)

- **How:** Increases the COM1 frequency by whole MHz when the dial is rotated clockwise. COM/NAV in COM and MHZ selected
- **What it does:** Adjusts the primary communication channel's frequency upwards in significant increments, streamlining the process of tuning to higher COM1 frequencies. This is especially useful in environments where quick frequency changes are necessary for effective communication.
- **Search Term:** INCREASE COM1 (WHOLE)
- **Scan Result:**
 - **PC:** 61
 - **Xbox:** \ + RIGHT_ALT
- **Indication:** MHz Blue & COM green

DECREASE COM1 FRACTIONAL (ROTARY DIAL, ROTATE CW)

- **How:** Decreases the COM1 frequency's fractional part when the dial is rotated counterclockwise. COM/NAV in COM and KHZ selected
- **What it does:** This action fine-tunes the COM1 frequency by adjusting its fractional (kHz) component, allowing for precise tuning to the desired communication channel. It's essential for ensuring clear communication with ATC or other aircraft by matching the exact frequency required.
- **Search Term:** DECREASE COM1 (FRACT)
- **Scan Result:**
 - **PC:** 62
 - **Xbox:** \ + LEFT_SHIFT + CTRL
- **Indication:** KHz Blue & COM green

INCREASE COM1 FRACTIONAL (ROTARY DIAL, ROTATE CW)

- **How:** Increases the COM1 frequency's fractional part when the dial is rotated clockwise. COM/NAV in COM and KHZ selected
- **What it does:** This action fine-tunes the COM1 frequency by adjusting its fractional (kHz) component, allowing for precise tuning to the desired communication channel. It's essential for ensuring clear communication with ATC or other aircraft by matching the exact frequency required.
- **Search Term:** INCREASE COM1 (FRACT)
- **Scan Result:**
 - **PC:** 63
 - **Xbox:** \ + LEFT_SHIFT + LEFT_ALT
- **Indication:** KHz Blue & COM green

DECREASE NAV1 WHOLE (ROTARY DIAL, ROTATE CCW)

- **How:** Decreases the NAV1 frequency's whole number (MHz) when the dial is rotated counterclockwise. COM/NAV in COM and KHZ selected
- **What it does:** This adjustment lowers the NAV1 frequency in significant (MHz) increments, facilitating quick changes to navigate using different VOR or localizer signals. It's critical for adapting navigation settings to align with flight plan changes or ATC instructions.
- **Search Term:** DECREASE NAV1 (WHOLE)
- **Scan Result:**
 - **PC:** 64
 - **Xbox:** \ + LEFT_SHIFT + RIGHT_ALT
- **Indication:** MHz Blue & NAV orange

INCREASE NAV1 WHOLE (ROTARY DIAL, ROTATE CW)

- **How:** Increases the NAV1 frequency's whole number (MHz) when the dial is rotated clockwise. COM/NAV in NAV and MHZ selected
- **What it does:** Adjusts the NAV1 frequency upwards in whole MHz steps, allowing for swift tuning to new navigational aids or ILS approaches. This capability is vital for maintaining course accuracy and responding to navigational adjustments.
- **Search Term:** INCREASE NAV1 (WHOLE)
- **Scan Result:**
 - **PC:** 65
 - **Xbox:** \ + LEFT_CTRL + LEFT_ALT
- **Indication:** MHz Blue & NAV orange

DECREASE NAV1 FRACTIONAL (ROTARY DIAL, ROTATE CCW)

- **How:** Decreases the NAV1 frequency's fractional part when the dial is rotated counterclockwise. COM/NAV in NAV and MHZ selected
- **What it does:** Fine-tunes the NAV1 frequency by adjusting its fractional (kHz) part, enhancing the precision of navigation frequency settings. It's crucial for aligning with specific VOR or ILS frequencies for accurate navigation and approach procedures.
- **Search Term:** DECREASE NAV1 (FRACT)
- **Scan Result:**
 - **PC:** 66
 - **Xbox:** \ + LEFT_CTRL + RIGHT_ALT
- **Indication:** KHz Blue & NAV orange

INCREASE NAV1 FRACTIONAL (ROTARY DIAL, ROTATE CW)

- **How:** Increases the NAV1 frequency's fractional part when the dial is rotated clockwise. COM/NAV in NAV and KHZ selected
- **What it does:** Precisely adjusts the NAV1 frequency's kHz component, ensuring accurate tuning to the required navigation signal. This function is essential for exact navigation aid alignment, especially in complex flight operations or when navigating close to multiple signal sources.
- **Search Term:** INCREASE NAV1 (FRACT)
- **Scan Result:**
 - **PC:** 67
 - **Xbox:** \ + LEFT_ALT + RIGHT_ALT
- **Indication:** KHz Blue & NAV orange

AUTOMATIC DIRECTION FINDER (ADF)



ADF SHIFT (ROTARY BUTTON, SHORT PRESS)

How: Adjusts the ADF frequency by cycling through the digits with a short press of the rotary button.

- **What it does:** This action enables the pilot to select and set a specific digit of the ADF frequency, making it possible to tune into a desired Non-Directional Beacon (NDB) frequency. Accurate tuning is vital for navigation and homing on NDBs, especially useful in environments with limited visibility or for general orientation.
- **Search Term:** Not applicable.
- **Scan Result:** Not applicable

DECREASE ADF1 (100) (ROTARY DIAL, ROTATE CCW)

- **How:** Decreases the ADF1 frequency by 100s when the dial is rotated counterclockwise. COM/NAV in NAV and KHZ selected
- **What it does:** This action reduces the Automatic Direction Finder (ADF) frequency in significant increments, allowing for quicker adjustments when tuning to a specific NDB (Non-Directional Beacon). It's vital for navigation, especially in areas where NDBs are used for approaches or as waypoints.
- **Search Term:** DECREASE ADF1 (100)
- **Scan Result:**
 - **PC:** 70
 - **Xbox:** [+ LEFT_SHIFT
- **Indication:** III white

INCREASE ADF1 (100) (ROTARY DIAL, ROTATE CW)

- **How:** Increases the ADF1 frequency by 100s when the dial is rotated clockwise.
- **What it does:** Adjusts the ADF frequency upwards in large increments, facilitating fast tuning to the desired beacon frequency. This is especially useful for long-range navigation using NDBs, allowing pilots to efficiently select the correct beacon.
- **Search Term:** INCREASE ADF1 (100)
- **Scan Result:**
 - **PC:** 71
 - **Xbox:** [+ LEFT_CTRL
- **Indication:** III white

DECREASE ADF2 (10) (ROTARY DIAL, ROTATE CCW)

- **How:** Decreases the ADF2 frequency by 10s when the dial is rotated counterclockwise.
- **What it does:** Enables finer adjustment of the ADF frequency, allowing for precise tuning to a beacon by modifying the frequency in smaller increments. This aids in accurate navigation and ensures reliable signal reception from the selected NDB.
- **Search Term:** DECREASE ADF2 (10)
- **Scan Result:**
 - **PC:** 72
 - **Xbox:** [+ LEFT_ALT
- **Indication:** II white

INCREASE ADF2 (10) (ROTARY DIAL, ROTATE CW)

- **How:** Increases the ADF2 frequency by 10s when the dial is rotated clockwise.
- **What it does:** This function allows for precise tuning of the ADF to the desired NDB by increasing the frequency in moderate increments. It's crucial for navigating using NDBs, especially when multiple beacons are in close proximity.
- **Search Term:** INCREASE ADF2 (10)
- **Scan Result:**
 - **PC:** 73
 - **Xbox:** [+ RIGHT_ALT
- **Indication:** II white

DECREASE ADF1 (1) (ROTARY DIAL, ROTATE CW)

- **How:** Increases the ADF1 frequency by ones when the dial is rotated counterclockwise.
- **What it does:** This function fine-tunes the Automatic Direction Finder (ADF) frequency by adjusting the smallest digit, allowing for precise tuning to specific Non-Directional Beacons (NDBs). It's essential for navigation, especially when using ADF for bearing information to or from an NDB.
- **Search Term:** INCREASE ADF1 (1)
- **Scan Result:**
 - **PC:** 74
 - **Xbox:** [+ LEFT_SHIFT + LEFT_CTRL
- **Indication:** I white

INCREASE ADF1 (1) (ROTARY DIAL, ROTATE CW)

- **How:** Increases the ADF1 frequency by ones when the dial is rotated clockwise.
- **What it does:** This function fine-tunes the Automatic Direction Finder (ADF) frequency by adjusting the smallest digit, allowing for precise tuning to specific Non-Directional Beacons (NDBs). It's essential for navigation, especially when using ADF for bearing information to or from an NDB.
- **Search Term:** INCREASE ADF1 (1)
- **Scan Result:**
 - **PC:** 75
 - **Xbox:** [+ LEFT_SHIFT + LEFT_ALT
- **Indication:** I white

TRANSPONDER (XPDR)



XPDR SHIFT (ROTARY BUTTON, SHORT PRESS)

- **How:** Shifts the transponder (XPDR) digit position with a short press.
- **What it does:** Allows the pilot to select which digit of the transponder code is currently adjustable, facilitating the entry of a specific squawk code. This is crucial for air traffic control identification and communication, especially under IFR conditions.
- **Search Term:** Not applicable
- **Scan Result:** Not applicable
- **Indication:** Not specified

DECREASE TRANSPONDER (1000) (ROTARY DIAL, ROTATE CCW)

- **How:** Decreases the transponder code's thousands digit when the dial is rotated counterclockwise.
- **What it does:** This adjustment allows for changing the transponder code in larger increments, enabling quick setting or adjustment of the aircraft's squawk code as issued by ATC. It's an essential function for ensuring the aircraft is correctly identified on radar systems.
- **Search Term:** DECREASE TRANSPONDER (1000)
- **Scan Result:**
 - **PC:** 80
 - **Xbox:** [+ LEFT_SHIFT + RIGHT_ALT
- **Indication:** IIII white

INCREASE TRANSPONDER (1000) (ROTARY DIAL, ROTATE CW)

- **How:** Increases the transponder code's thousands digit when the dial is rotated clockwise.
- **What it does:** Facilitates the swift adjustment of the transponder's thousands digit, crucial for entering or changing squawk codes quickly in response to air traffic control instructions.
- **Search Term:** INCREASE TRANSPONDER (1000)
- **Scan Result:**
 - **PC:** 81
 - **Xbox:** [+ LEFT_CTRL + LEFT_ALT
- **Indication:** IIII white

DECREASE TRANSPONDER (100) (ROTARY DIAL, ROTATE CCW)

- **How:** Increases the transponder code's hundreds digit when the dial is rotated clockwise.
- **What it does:** This adjustment enables precise setting of the transponder code by modifying the hundreds place. It's crucial for quickly updating squawk codes as directed by air traffic control, ensuring the aircraft is correctly identified on radar systems.
- **Search Term:** INCREASE TRANSPONDER (100)
- **Scan Result:**
 - **PC:** 83
 - **Xbox:** [+ LEFT_ALT + RIGHT_ALT
- **Indication:** III white

INCREASE TRANSPONDER (100) (ROTARY DIAL, ROTATE CW)

- **How:** Increases the transponder code's hundreds digit when the dial is rotated clockwise.
- **What it does:** This adjustment enables precise setting of the transponder code by modifying the hundreds place. It's crucial for quickly updating squawk codes as directed by air traffic control, ensuring the aircraft is correctly identified on radar systems.
- **Search Term:** INCREASE TRANSPONDER (100)
- **Scan Result:**
 - **PC:** 83
 - **Xbox:** [+ LEFT_ALT + RIGHT_ALT
- **Indication:** III white

DECREASE TRANSPONDER (10) (ROTARY DIAL, ROTATE CCW)

- **How:** Decreases the transponder code's tens digit when the dial is rotated counterclockwise.
- **What it does:** Allows for the adjustment of the transponder's tens place, facilitating the quick entry of specific squawk codes. This function is essential for maintaining accurate aircraft identification, particularly during airspace transitions or emergency situations.
- **Search Term:** DECREASE TRANSPONDER (10)
- **Scan Result:**
 - **PC:** 84
 - **Xbox:**] + LEFT_SHIFT
- **Indication:** II white

INCREASE TRANSPONDER (10) (ROTARY DIAL, ROTATE CW)

- **How:** Increases the transponder code's tens digit when the dial is rotated clockwise.
- **What it does:** Enhances the ability to quickly change the transponder code by adjusting its tens digit, ensuring swift compliance with air traffic control instructions for identification and safety.
- **Search Term:** INCREASE TRANSPONDER (10)
- **Scan Result:**
 - **PC:** 85
 - **Xbox:**] + LEFT_CTRL
- **Indication:** II white

DECREASE TRANSPONDER (1) (ROTARY DIAL, ROTATE CCW)

- **How:** Decreases the transponder code's ones digit when the dial is rotated counterclockwise.
- **What it does:** Enables fine-tuning of the transponder squawk code by adjusting the last digit, allowing for precise entry of ATC-assigned codes. This level of control is crucial for accurate aircraft identification in controlled airspace.
- **Search Term:** DECREASE TRANSPONDER (1)
- **Scan Result:**
 - **PC:** 86
 - **Xbox:**] + LEFT_ALT
- **Indication:** I white

INCREASE TRANSPONDER (1) (ROTARY DIAL, ROTATE CW)

- **How:** Increases the transponder code's ones digit when the dial is rotated clockwise.
- **What it does:** This function allows for the meticulous setting of the transponder code to the exact squawk assigned by air traffic control, ensuring precise identification and communication with radar operators.
- **Search Term:** INCREASE TRANSPONDER (1)
- **Scan Result:**
 - **PC:** 87
 - **Xbox:**] + RIGHT_ALT
- **Indication:** I white

Microsoft Flight simulator known limitations

In the realm of Microsoft Flight Simulator, players have encountered a variety of limitations and challenges related to control mapping and command functionalities. These issues, while significant, stem from the game's development by Microsoft/Asobo and are not a result of any shortcomings in the controllers themselves. Here's a more detailed look, emphasizing this point and the improvements over time:

- **Mapping Controls Can Be Tedious:** Many players find the process of mapping keyboard controls and joystick buttons within Microsoft Flight Simulator to be cumbersome. This involves a detailed navigation through the controls menu to manually assign each desired command, a process that could be less intuitive for those with more basic or less sophisticated setups.
- **Missing or Non-functional Commands:** Certain commands critical to an authentic cockpit experience, like the APU Master Switch and fuel pumps, are unassignable and/or non-functional due to their absence in the game's Software Development Kit (SDK). This issue highlights limitations within the game's development rather than issues with the controllers used. Additionally, some commands, while seemingly assignable, do not function as expected, which could indicate a discrepancy or bug within the game's programming itself.
- **Double Assignments and Axis Sensitivity:** Players have reported issues with double assignments, where a single input triggers multiple unintended actions, such as activating the brakes affecting trim settings. This can significantly complicate control during critical maneuvers like taxiing or takeoff. Making adjustments to axis sensitivity and dead zones is a workaround, although it may require extensive trial and error to optimize.

It's crucial to acknowledge that these limitations are recognized by the development team at Microsoft/Asobo. There's a continuous effort to improve the simulator's functionality and user experience with each update. Recent updates have already made strides in addressing these concerns, and there is optimism within the community that future updates will continue to refine and improve these aspects of the game. This progressive approach to development underscores a commitment to enhancing the realism and enjoyment of the flight simulation experience for users across the globe.

Assigning Controls in Microsoft Flight Simulator for PC

- Coming Soon

Assigning Controls in X-Plane 12 for PC

- Coming Soon

Assigning Controls in Aerofly FS4 for PC

- Coming Soon
-

Technical Specifications

The AXAIR MIAP 24 PRO flight controller combines meticulous engineering with high-quality materials to deliver a superior flight simulation experience. This section outlines the specific technical specifications, providing a quick reference to its construction and performance characteristics.

Dimensions:

- **Length:** 133mm - Compact form factor to fit seamlessly into any flight sim setup.
- **Width:** 55mm - Slim design for easy integration into your cockpit.
- **Height:** 28mm - Low profile for an unobtrusive look and feel.
- **Weight:** 190 grams - Designed for ease of handling, offering a balance between durability and lightweight convenience.

Connectivity:

- **USB-C:** Ensures a fast and reliable connection, providing seamless integration with your flight simulator setup for uninterrupted gameplay.

Faceplate

- **Colors Available:** Black Matte, Grey Matte. Both options are adorned with precision engravings of common Airplane Mode Control Panel (MCP) texts, delivering a professional aesthetic and functional clarity.

Compatibility

The MIAP 24 PRO is engineered for broad compatibility, ensuring a seamless interface with the most popular flight simulation platforms and operating systems.

- **Supported Platforms:** Compatible with PC and Xbox.
- **Flight Simulation Software:** Works across various software, including but not limited to Microsoft Flight Simulator 2020, X-Plane 11 & 12, and Aerosoft FS2 & 4.

Troubleshooting & Support

Encountering issues with your AXAIR MIAP 24 PRO can be frustrating, but many common problems can be resolved quickly and easily. Below you'll find solutions to typical scenarios, along with warranty information and how to access our dedicated customer support team.

Common Issues and Solutions

Device Not Recognized

- **Check the USB-C Cable:** Ensure it's securely connected to both the MIAP 24 PRO and your PC or Xbox. Try a different cable if the issue persists.
- **Restart Your Device:** Often, restarting your PC, Console or Flight simulator software can resolve recognition issues, especially with Microsoft Flight Simulator 2020 as its cache can fill up quickly and overload the software, PC or Xbox.

Button or Switch Not Responding

- **Check for Assignments in Your Flight Sim:** Ensure the button or switch is correctly assigned to a function within your flight simulation software.
- **Reset the MIAP 24 PRO:** Unplug and then re-plug the MIAP 24 PRO to reset its connection to your device. (do not use the hardware reset on the rear of the controller)

Inaccurate Control Response

- **Restart Your Device:** Often, restarting your PC, Console or Flight simulator software can resolve recognition issues, especially with Microsoft Flight Simulator 2020 as its memory can fill up quickly and overload the software, PC or Xbox.

Warranty and Customer Service

Warranty Coverage

Your AXAIR MIAP 24 PRO comes with a 6-month warranty from the date of purchase, covering defects in materials and workmanship under normal use. This warranty does not cover damages resulting from improper handling, installation, maintenance by third parties, or unauthorized modifications, including opening the device's casing. **Opening the MIAP 24 PRO casing will void your warranty immediately.**

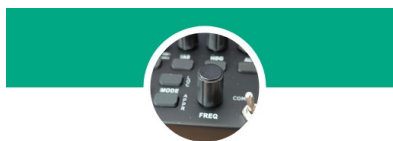
How to Claim Warranty

- **Contact Customer Support:** If you encounter an issue covered under warranty, please reach out to our customer support team with your purchase details and a description of the problem.
- **Assessment:** Our team will assess your claim and guide you through the process of returning the product for repair or replacement, if applicable.

Dedicated Customer Support

For any questions, troubleshooting assistance, or help with your MIAP 24 PRO, our customer support team is here to help. You can reach us through:

- **Email:** support@axair.xyz
- **Facebook:** Parts4sim
- **Chat:** Chat with us on Whatsapp in case of problems



AXAIR

WhatsApp business account



We're committed to ensuring a smooth and enjoyable flight simulation experience with the AXAIR MIAP PRO 24. Whether you need help setting up, troubleshooting issues, or have questions about your device, don't hesitate to get in touch.

About AXAIR and Axertions LLC

The AXAIR MIAP PRO 24, a testament to innovation and engineering precision, is proudly brought to you by Axertions LLC. As a company dedicated to enhancing your flight simulation experience, Axertions LLC stands behind the quality and performance of the MIAP PRO 24, ensuring it meets the high standards expected by flight simulation enthusiasts worldwide. Our commitment to excellence extends beyond the manufacturing of the controller, offering comprehensive customer support and after-sales service to assist you on your flight simulation journey.

For more information about Axertions LLC, our products, and our services, please contact info@axertions.com