

# AXON

SERIES X|S  
MIAP FOR XBOX



## AXAIR MIAP (STD) Controller User Guide

**Welcome to the world of enhanced flight simulation with the AXAIR MIAP (Mini Autopilot) controller. Designed for precision and ease, this controller enables users to swiftly adjust airplane autopilot settings and COM/NAV radio parameters.**

### Compatibility:

- PC Version: Compatible with a broad range of simulator software, the MIAP's functionalities can vary based on the software in use:
- X-plane: Users can benefit from the capability to map nearly all cockpit functions.
- Flight Simulator 2020: While some Microsoft updates are still pending for complete functionality, the majority of essential actions in FS2020 are already operational. These actions can be comfortably mapped to the MIAP's diverse buttons, knobs, and switches.

### XBOX Version Overview:

- The evolution of the MIAP family includes an edition exclusively for the XBOX console. Designed for Flight Simulator 2020 on the XBOX Series S/X, this version boasts unique features:
- The device's firmware is embedded directly into MIAP's main processor. This allows it to function either as a standalone keyboard or as an adjunct to an existing keyboard linked to the console.
- Each button, rotary, and switch is designed to produce a specific key sequence. Notably, the top-left rotary button (OBS), radio frequency button, and the COM/NAV toggle switch operate akin to the "Shift" key on standard keyboards. Activating them results in alternate key sequences, of the MIAP buttons and dials, for each specific position. **Consequently, these controls will not display their own key sequences.**
- One of the delights for users is the flexibility offered by FS2020: they can craft diverse aircraft profiles, each with its unique set of MIAP button configurations.

### Design & Build:

- The MIAP boasts a robust acrylic casing, ensuring durability.
- It features a backlit front panel that complements the intuitive switch position indicator lights.
- The base plate is equipped with pre-drilled holes, allowing users the option to integrate the MIAP seamlessly into their existing setups. A word of caution: when mounting, ensure screws are only lightly tightened to preserve the integrity of the acrylic and prevent potential cracking.

### **Connecting MIAP to XBOX Series S/X:**

1. Attach the MIAP to your XBOX console by inserting the USB connector into any available USB port on the console.
2. While USB hubs are generally compatible, we can't assure flawless MIAP operation with all hub types. If opting to use a hub, we recommend selecting a powered USB hub for optimal performance.
3. For the smoothest initial setup, disconnect any other keyboards before connecting the MIAP. When you power on Flight Simulator for the first time the MIAP is connected, avoid using the "quick resume" feature.
4. Upon connection, the MIAP will be recognized as a standard keyboard. If you have multiple keyboards connected simultaneously, they will integrate with the MIAP. In this scenario, only one keyboard icon will be visible, but all merged keyboards remain functional.

### **About the USB Cable:**

The MIAP is paired with a premium silicon USB cable that measures 1 meter in length. If you require a longer connection:

- Extend the cable using USB 2.0 or USB 3.0 extension cables.
- Ensure you choose cables of type FEMALE A to MALE A.



### ***Language Settings Note:***

While MIAP's software is versatile enough to work with various keyboard language settings, we recommend a specific configuration for the best user experience:

- To prevent any potential overlapping or repeated inputs, adjust your Xbox settings to utilize the 'US Keyboard' layout. You can find this option under settings/language and dictation.

### **Troubleshooting & Recommendations for the MIAP:**

If Your MIAP Isn't Responding Correctly:

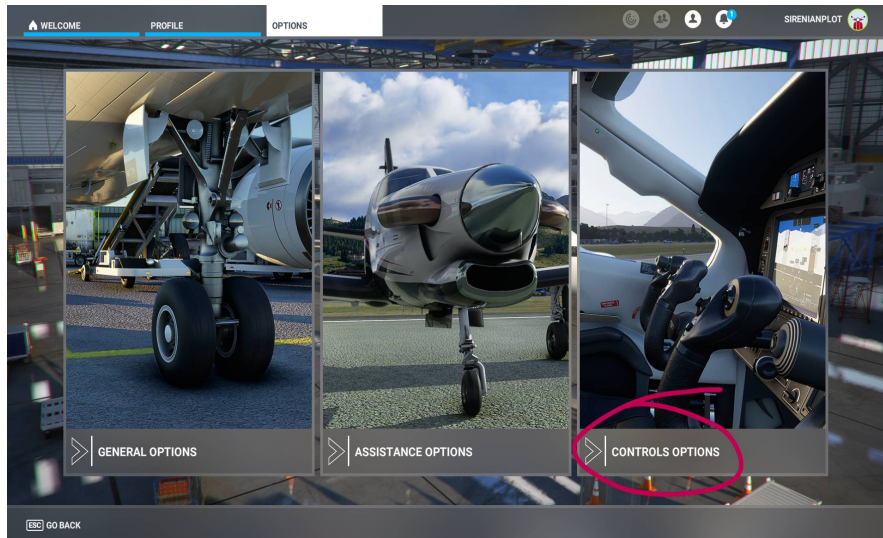
If the MIAP isn't operating as outlined in this guide, or if the scanning process doesn't display results—or even displays incorrect results—in the simulator control settings, consider the following steps:

1. Restart both your XBOX console and the Flight Simulator software. This can be done irrespective of whether the MIAP is connected.
2. The MIAP doesn't have an inbuilt sleep function and the XBOX USB ports will always be powered. If you wish to power it down post XBOX shutdown, simply disconnect the USB cable.

## Assigning Buttons, Switches, and Knobs to the MIAP:

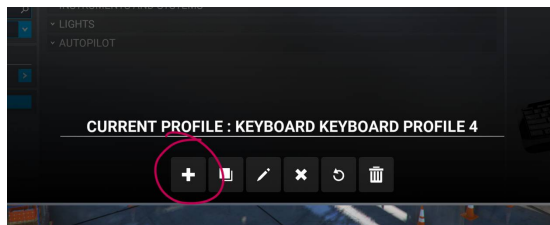
### STEP 1: Access Control Options

- From the main menu, select “CONTROL OPTIONS”.



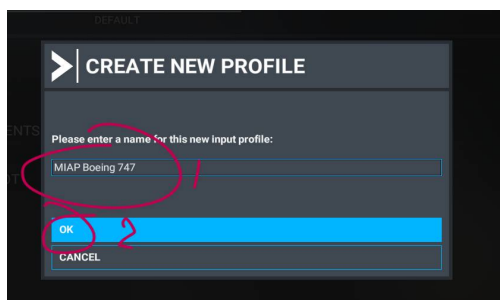
### STEP 2: Choose or Create Profile

- If you've selected a US keyboard in the Xbox settings, it's recommended to use the default keyboard profile and add MIAP assignments.
- If you however wish to create or add a new profile, click on the “+” symbol. If using an existing keyboard within this new profile, assign keyboard buttons next to the MIAP buttons as detailed in subsequent steps.



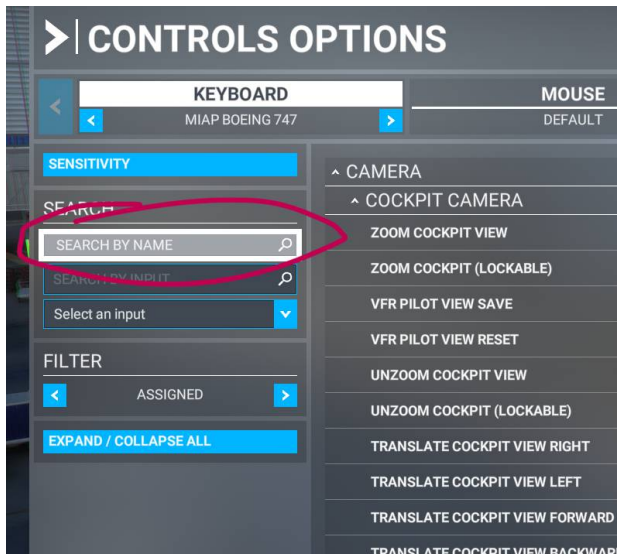
### STEP 3: Name Your Profile

- Type a name for your desired profile. Remember, you can create numerous profiles for different airplane models. Confirm by clicking 'OK'.



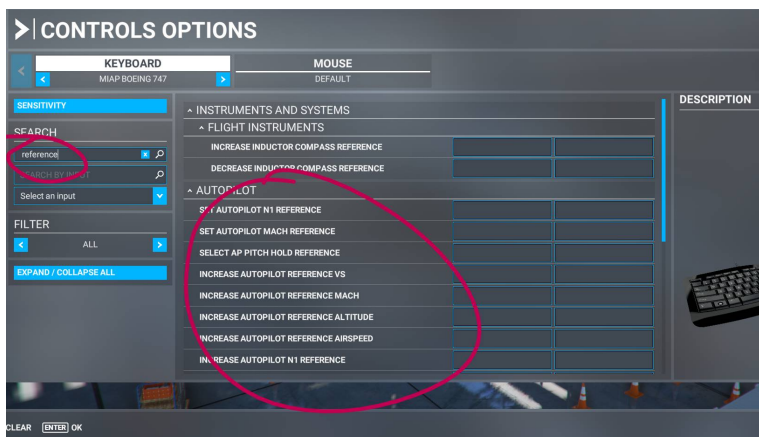
#### STEP 4: Search for Actions

- Use the 'SEARCH BY NAME' tab to find the action you'd like to assign. For instance, you might want to assign an action to a rotary knob that adjusts the Autopilot altitude.



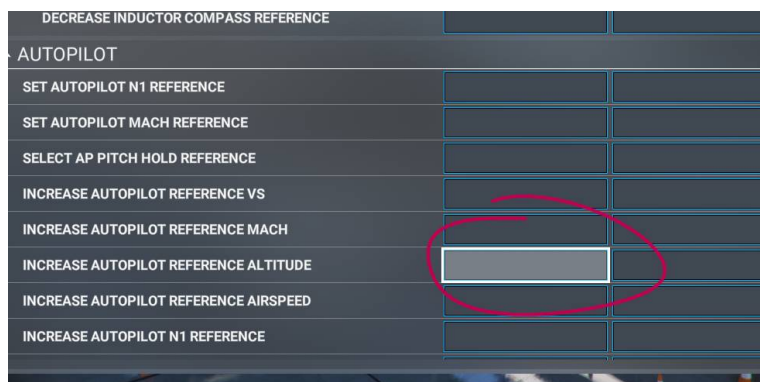
#### STEP 5: Filter Actions

- Key in 'reference'. All assignable actions with 'reference' in their name will be displayed.
- Tip: Ensure that the 'FILTER' below the 'SEARCH' tab is set to show 'ALL' actions.



#### STEP 6: Select Tab for Assignment

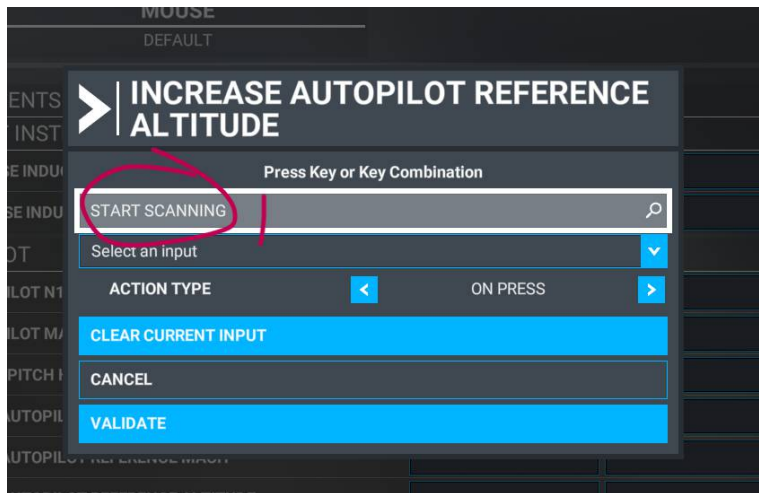
- Click the highlighted tab window.
- Note: Two rows of tabs are present. The second row allows you to assign an alternate button or knob to the identical action.





### STEP 7: Start Scanning

- Click on the grey tab labeled 'START SCANNING'.



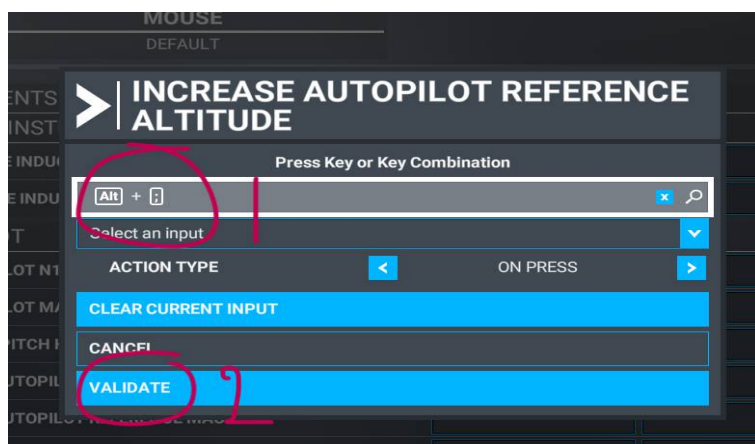
### STEP 8: Operate the MIAP Knob

- For our example, rotate the ALT knob in a clockwise direction.



### STEP 9: Verify Scan Input

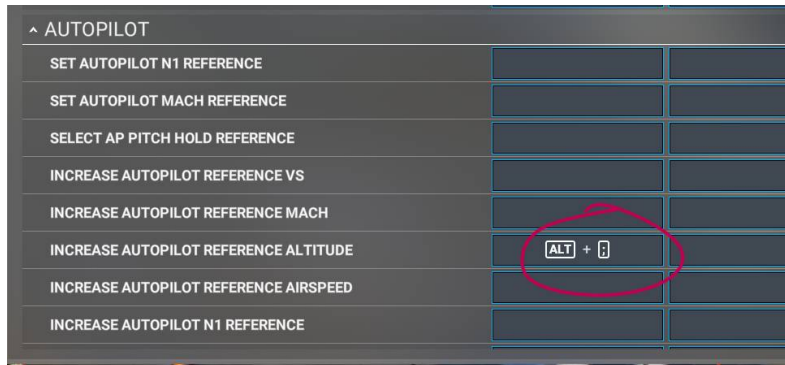
- If your keyboard language version in the Xbox settings menu is set to English "ALT + ;" should now appear in the scan tab.
- Check against reference sheet A to ensure the input matches. If discrepancies arise, re-scan until the correct string displays. Confirm the assigned action afterwards.



*(Other keyboard language settings can produce different text strings)*

### STEP 10: Review Action Assignment

- Within the action list, you'll now see the rotary knob, which in our example, was set to 'INCREASE AUTOPILOT REFERENCE ALTITUDE'.



### Step 11: Test Your Profile

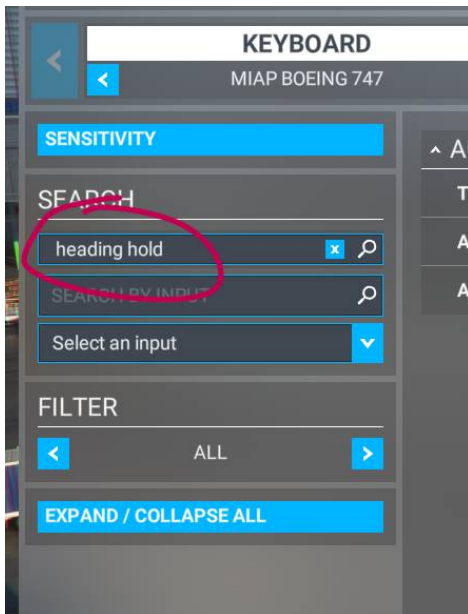
- Repeat the steps for other assignments, after that, save your profile and return to the main menu. Next, begin a flight to test out your assigned actions.



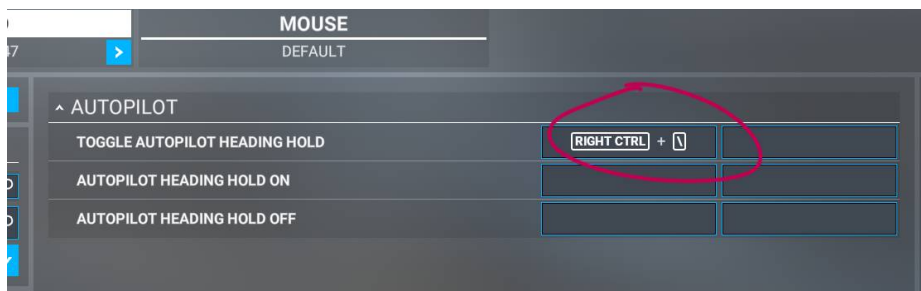
**Steps for Assigning Rotary Knobs button functions:**

**STEP 12: Assigning the HDG Button as example**

- Navigate to the 'SEARCH BY NAME' tab and input 'Heading hold'.

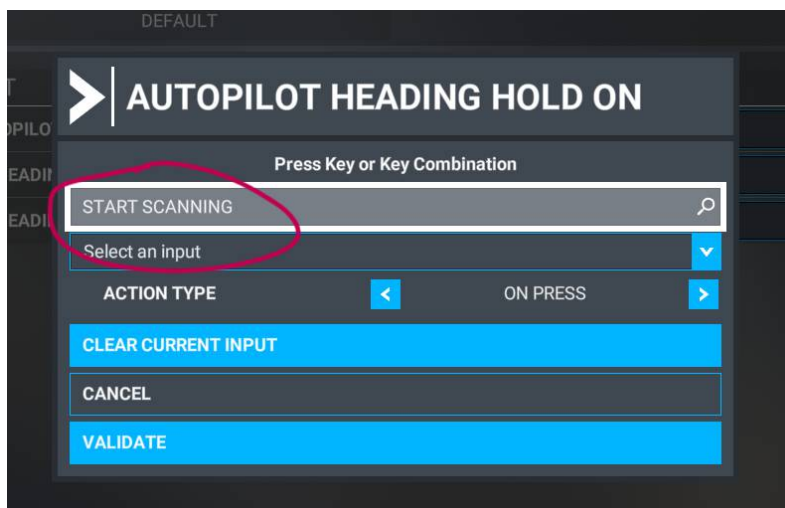


- Select the TAB adjacent to 'TOGGLE AUTOPILOT HEADING HOLD'.



**STEP 13: Initiate Scanning**

- Click on the 'START SCANNING' window.





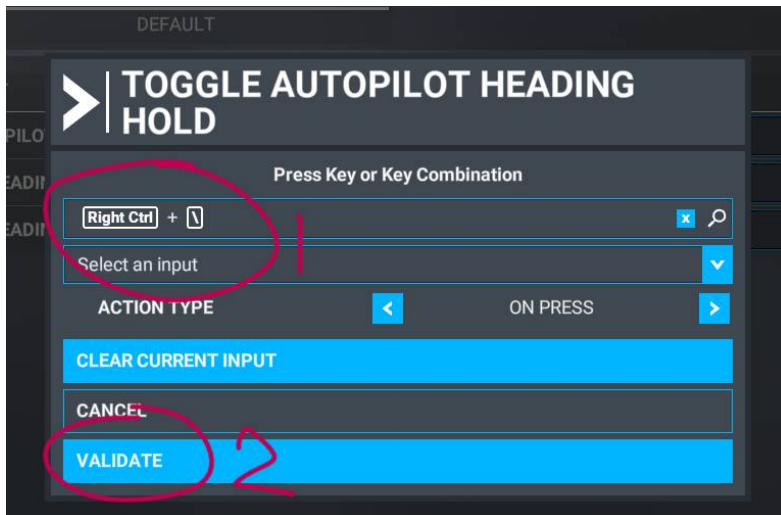
**STEP 14: Press the HDG Button**

- Click once on the corresponding MIAP button.



**STEP 15: Verify Button Scan**

- The input 'RIGHT CTRL + \\' should appear in the scan window after pressing the MIAP button.
- If a different string is displayed, rescan the button.
- Click on 'VALIDATE' to confirm your action.



Note: Repeat from STEP 12 for assigning the other buttons and rotary knobs (pressing atop a rotary knob)

**The MIAP device's design allows for efficient multitasking using a limited number of controls.**

1. Toggle Switch: Located at the bottom right of the device, this switch lets you choose between adjusting communication (COM) settings or navigation (NAV) settings.
2. SWAP Button: Depending on if you're in COM or NAV mode, this button will have different effects. Make sure to assign actions to this button for both the COM and NAV positions.
3. Button on the Tuning Knob: Think of this as the 'Shift' key on a keyboard. On its own, it doesn't show any change. However, when paired with the tuning knob, it alters its function. This lets you tune frequencies in large measures (Megahertz) or in more precise adjustments (Kilohertz). *The latest model has blue backlight indications to show the knob selection to be either set to MHz or KHz.*
4. CRS Knob: This knob offers dual functionality. By pressing the button on top, you can toggle between two different settings. Ensure you assign the rotary's left and right turns for both OBS1 and OBS2 settings. *The latest model has blue backlight indications to show the knob selection to be either set to VOR1 or VOR2.*

*Remember, the COM/NAV switch and pressing the CRS or FREQ knob won't register an input since they function solely as a SHIFT.*

The following steps shows an example of how to assign actions to this combination of toggle switch, button and rotary knob

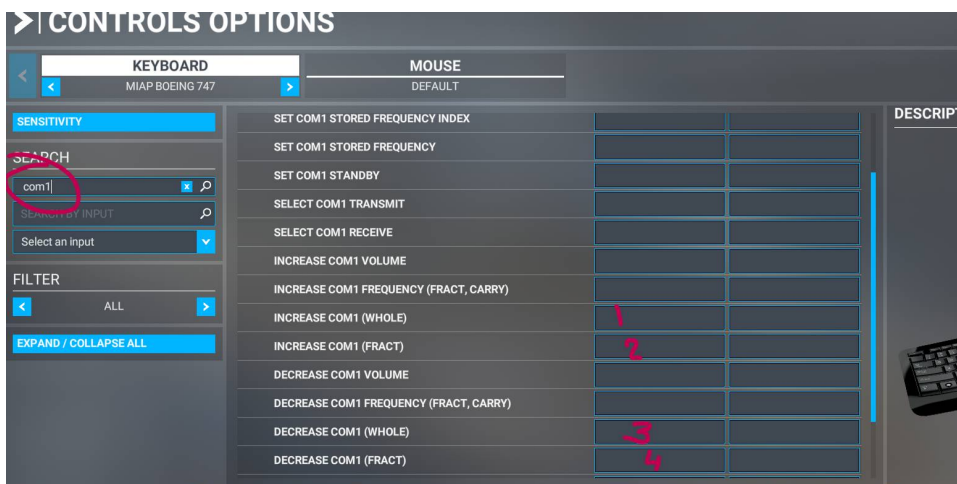


**STEP 16: Set Switch to COM**

- Toggle the switch to 'COM'.

**STEP 17: Adjust COM1 Frequency tuning**

- Search for 'COM1'.
- Click the TAB next to 'INCREASE COM1 (WHOLE)'.
- Rotate the FREQ knob clockwise.
- Check if the string matches reference table 'A' and validate the action.
- Scan 'DECREASE COM1 (WHOLE)' and rotate the FREQ knob counter-clockwise.



### STEP 18: Alternate COM1 Adjustments

- Press the FREQ button atop the knob once.
- Repeat steps but choose 'INCREASE COM1 (FRACT)' and 'DECREASE COM1 (FRACT)'.
- When done correctly, you can toggle between MHz and kHz frequencies by pressing the rotary knob.

### STEP 19: Assign NAV1 Frequency tuning

- Toggle the switch to NAV.
- Repeat the steps from STEP 17 but search for 'NAV1' to assign navigation frequencies.

### STEP 20: Assign VOR1&2 Frequencies tuning

- You can use the same process to assign OBS1 and OBS2

**Final Note: Always save your profile before exiting to the main menu.**



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