

# Introduction — Quick Start Manual

## Controllers supported

- **MIAP24PRO**
- **MILI23**

## Supported simulators

- **Microsoft Flight Simulator 2020 (MSFS 2020)**
- **Microsoft Flight Simulator 2024 (MSFS 2024)**
- **Other PC simulators:** X-Plane, Aerofly FS 3 & FS 4, DCS, etc.  
(via standard joystick support)

These controllers connect via **USB** and operate as flight control devices.

How they are recognized depends on the **platform** and **firmware mode** in use.

---

## How each platform sees your controller

### PC (Windows)

When connected to a PC:

- **MIAP24PRO** is always recognized as a **game controller (joystick)**
- **MILI23** is recognized as a **game controller (joystick)** when **PC firmware is flashed**

On PC:

- All buttons, dials, and switches appear as **dedicated joystick buttons**
- Joystick axes and buttons are assigned directly inside the simulator
- Multiple profiles per controller are supported, allowing different setups per aircraft or flying style

---

### Xbox Series X / S and PlayStation 5

On **Xbox** and **PlayStation 5**, the MIAP24PRO and MILI23 **cannot operate as native joysticks**.

This is because Xbox and PS5 do not permit third-party USB devices to register as generic joysticks.

Instead, the controllers operate in **keyboard-emulation mode**.

This means:

- The controller sends **keyboard keystrokes**
- Microsoft Flight Simulator reads these exactly like a normal keyboard
- Simulator functions are assigned by mapping **keyboard keys** inside MSFS

You bind a keyboard key to a simulator function, and the controller sends that key when the button, switch, or dial is used.

## PlayStation 5 note (important)

On PlayStation 5:

- Only **one keyboard device** can be active at a time
- You can use **one AXAIR controller in keyboard mode** or one normal keyboard

This is **not a PlayStation hardware limitation**.

It is a limitation of **Microsoft Flight Simulator 2024 on PlayStation**.

Functionally, the controller behaves exactly the same as on Xbox.

---

# Switching modes on the controllers

## MIAP24PRO

### Switching console simulator profiles

1. Hold **X1** and **X2**
2. While holding them, press and hold **SWAP**
3. After a few seconds, release all buttons

The rear LED next to the USB port will indicate the active profile:

- **1 flash** → MSFS 2020 (Xbox)
- **2 flashes** → MSFS 2024 (Xbox)
- **3 flashes** → MSFS 2024 (PlayStation)

The LED repeats this indication every **5 seconds**.

### Switching between PC and Console mode

There is a hidden **pin-press button** next to the rear LED:

- **Press once** → **Blue LED** → PC mode (joystick)
- **Press again** → **Red LED** → Console mode (keyboard)

---

## MILI23 (console firmware)

When the MILI23 is flashed with **console firmware**:

- Press the **I-symbol button**
- The front LED (under the white button, above the airplane symbol) will flash:
  - **1 blue flash** → MSFS 2020
  - **2 blue flashes** → MSFS 2024

⚠ PC joystick mode on the MILI23 requires **PC firmware flashing** and **cannot** be selected using buttons on the device.

The firmware flasher and latest firmware are available on the **AXAIR website**.

---

## Recommended setup: duplicate the default profiles

Duplicating default profiles is **not required for functionality**, but **strongly recommended**.

Many AXAIR-generated keystrokes already match default simulator bindings.

By duplicating the default profiles and adding AXAIR inputs, you:

- Avoid key conflicts
- Preserve all standard simulator functions
- Keep an easy fallback to default behavior

---

## Microsoft Flight Simulator 2020 (PC & Xbox)

### How profiles work

- MSFS 2020 uses **one profile per device**
- There is a single **Default** profile
- Applies to:
  - Joysticks (PC)
  - Keyboards (Xbox / PS5)

### Recommended procedure

1. Go to **Options** → **Controls**

2. Select your device:
  - PC: MIAP24PRO / MILI23
  - Console: Keyboard
3. Select the **Default** profile
4. Choose **Duplicate**
5. Name the profile (example):  
MILI / MIAP
6. Add AXAIR buttons or keys
7. Save the profile

---

## Microsoft Flight Simulator 2024 (Xbox & PlayStation 5)

### Important difference

MSFS 2024 uses **two keyboard profiles**:

1. **General** (menus, camera, UI)
2. **Aircraft** (flight controls, cockpit)

Both profiles should be duplicated.

### Recommended procedure

1. Go to **Options** → **Controls** → **Keyboard**

#### Duplicate the General profile

- Select **Default – General**
- Choose **Duplicate**
- Rename to:  
MILI / MIAP

#### Duplicate the Aircraft profile

- Select **Default – Aircraft**
- Choose **Duplicate**
- Rename to:

## Assign AXAIR inputs

- Add AXAIR keys to both profiles
- Save both profiles

---

# Assigning keyboard commands (Xbox & PlayStation 5)

## Step-by-step

1. Start Microsoft Flight Simulator
2. Go to **Options** → **Controls** → **Keyboard**
3. Select your duplicated profiles (General and Aircraft)
4. Use **Search** to find the function
5. Select the empty binding field
6. Activate the AXAIR control
7. Confirm the detected input
8. Save the profile

---

## Example 1: Landing Gear (MILI23 – switch)

1. Go to **Options** → **Controls** → **Keyboard**
2. Select your duplicated profile
3. Search for:  
Landing Gear Up
4. Select the empty binding box
5. Move the landing gear handle **UP** on the MILI23
6. Confirm and save

---

## Example 2: Heading Bug (MIAP24PRO – rotary)

### ⚠ Important for rotary encoders

- Do **not** spin

- Use **one click only** during scanning

## Assign increase

1. Search for:  
Increase Heading Bug
2. Select the binding box
3. Rotate the **HDG dial one click clockwise**
4. Confirm

## Assign decrease

1. Search for:  
Decrease Heading Bug
2. Select the binding box
3. Rotate the **HDG dial one click counter-clockwise**
4. Confirm and save

---

## Important notes about scanning (console)

- One rotary click = one keystroke
- Never rotate multiple clicks during scanning
- Prevents double bindings and incorrect detection

---

## Quick summary (Xbox & PS5)

- Input type: **Keyboard**
- Duplicate default profiles
- MSFS 2020: **one** profile
- MSFS 2024: **two** profiles (General + Aircraft)
- Switches & buttons → activate once
- Dials → **one click only** during scanning