

AIRBUS MCDU / FMC

BEGINNER'S TUTORIAL · ASOBO DEFAULT A320 / A321 FAMILY

WHAT THE MCDU ACTUALLY DOES

The MCDU (Multi-function Control and Display Unit) is how you talk to the FMC (Flight Management Computer). It holds your flight plan, your performance numbers (speeds, altitudes), and feeds all of that to the autopilot through the FCU above it. There are two identical units on the center pedestal — Captain's side and First Officer's side — either one works the same way.

You don't need to master it before your first flight. The default Asobo A320/A321 will fly perfectly well off a simple World Map flight plan while you're still learning — use this tutorial to build up MCDU skills at your own pace.

THE KEYPAD, AT A GLANCE

Key	What it's for
LSKs (line select keys)	The small buttons down each side of the screen. Press the one next to a field to select or enter data on that line.
Scratchpad	The blank line at the bottom of the screen. Type here first, then press an LSK to send that data into a field.
INIT	Flight initialization — origin, destination, cost index, cruise altitude.
F-PLN	Flight plan — your route, waypoint by waypoint.
PERF	Performance — takeoff, climb, cruise, descent, and approach speeds.
RAD NAV	Radio navigation — ILS, VOR, and ADF frequencies.
PROG	Progress page — where you are along the route right now.
DIR	Direct-to — jump straight to any waypoint in your plan.
CLR	Clear — deletes what's in the scratchpad, one character at a time.

STEP-BY-STEP: INITIALIZING A FLIGHT

- 1 Press **INIT**.
- 2 Enter your departure and destination airports as ICAO codes (e.g. type *KJFK/EGLL* into the scratchpad, then press the LSK next to the FROM/TO field).
- 3 Enter a cost index. Lower numbers save fuel and fly slower; higher numbers save time and fly faster. 20–40 is a reasonable default while you're learning.
- 4 Enter your planned cruise altitude.
- 5 Confirm the page, then move on to F-PLN.

STEP-BY-STEP: BUILDING THE FLIGHT PLAN

- 1 Press **F-PLN**.
- 2 Check the departure runway and SID (departure procedure) if one applies.
- 3 Add en-route waypoints: type the waypoint name into the scratchpad, then press the LSK next to where you want it inserted.
- 4 Add your arrival STAR and approach once you know which runway you'll be using.
- 5 Watch for **DISCONTINUITY** — it means there's a gap between two disconnected legs. Select the waypoint just after the gap and it will usually reconnect the route.

STEP-BY-STEP: SETTING PERFORMANCE DATA

- 1 Press **PERF**.
- 2 On the **TAKEOFF** page: set your flap setting; V1/VR/V2 are usually calculated for you, and you can set a flex temperature if using reduced thrust.
- 3 On the **CLB** page: check your climb speed or Mach.
- 4 On the **CRZ** page: confirm cruise altitude and cruise speed/Mach.
- 5 On the **DES** and **APPR** pages: check descent speed and your approach speed (Vapp).

HOW THE FCU TALKS TO THE FMC

The FCU (Flight Control Unit — the panel with the knobs, just above the MCDUs) is what you actually touch in flight to fly the aircraft on autopilot. It has two modes for every knob:

PULL a knob → Selected mode. The aircraft flies exactly what you've dialed in, overriding the flight plan. Use this when ATC gives you a heading, altitude, or speed off your plan.

PUSH a knob → Managed mode. The aircraft follows the FMC's programmed flight plan and profile instead of the dialed value. Use this once your route is set and you want it flown automatically.

This applies to the speed/Mach, heading/track, altitude, and vertical speed knobs alike.

Beginner tips: Check the PROG page in flight to confirm the FMC is tracking your route correctly. If the aircraft isn't following your plan, make sure you pushed (not pulled) the relevant FCU knob. And don't stress about a perfect flight plan on your first few flights — a rough MCDU route, or even just the World Map planner, is enough to get flying while these pages become familiar.

SIMULATION USE ONLY. This tutorial explains general Airbus-style MCDU/FMC operation as implemented in the default Asobo A320/A321 family in Microsoft Flight Simulator. Some pages and features found in study-level add-ons (iniBuilds, FlyByWire, Fenix) may not be present or may work slightly differently in the default aircraft. Not an airline training document — for real-world procedures, refer to the aircraft's official FCOM.