

GARMIN G1000 NXi / GFC 700

BEGINNER'S TUTORIAL · DIAMOND DA62

WHAT THE G1000 ACTUALLY DOES

The Garmin G1000 (NXi in its modern form) replaces the traditional "six-pack" of round gauges with two large screens: a Primary Flight Display (PFD) directly in front of you, and a Multi-Function Display (MFD) in the center. Together they handle navigation, communication, engine monitoring, and — paired with the GFC 700 — autopilot control.

On the DA62, the MFD's engine page shows both FADEC-managed engines side by side. There's nothing to lean, feather, or govern manually here — the single power levers do that work, so this page is mainly for monitoring rather than managing.

THE LAYOUT, AT A GLANCE

Control	What it's for
PFD (left screen)	Attitude, airspeed, altitude, heading, CDI — your primary flying instruments.
MFD (right / center screen)	Moving map, flight plan, engine data, systems pages.
FMS knob	Dual concentric knob — outer ring selects the page group, inner knob moves the cursor or enters data.
Softkeys	Row of buttons under the screen — their function changes depending on which page is open.
COM / NAV knobs	Tune a standby frequency; the flip-flop button swaps it to active.
Direct-To (D>)	Jump straight to any waypoint, skipping the rest of the flight plan.
MENU	Opens a list of options specific to the page you're viewing.
CLR	Clears an entry, or backs out one step.
PROC	Loads a departure, arrival, or approach procedure.

STEP-BY-STEP: ENTERING A FLIGHT PLAN

- ① Turn the large FMS knob to select the **FPL** (flight plan) page group on the MFD.
- ② Press the small FMS knob, or use **CLR**, to get an empty flight plan line ready.
- ③ Turn the inner knob to spell your first waypoint, the outer knob to move between letters, then press **ENT**.
- ④ Repeat for each waypoint in order, building the route leg by leg.
- ⑤ The active leg highlights in white on the map — check it matches your planned route before departing.

STEP-BY-STEP: FLYING AN APPROACH

- ① Press **PROC**.
- ② Select "Select Approach," choose the runway and approach type, then **ENT**.
- ③ Choose a transition, or "Vectors" if ATC is vectoring you to final.
- ④ Confirm "Load?" — this adds the approach to the end of your flight plan without activating it yet.
- ⑤ Once cleared for the approach, activate the correct leg and arm APR mode on the autopilot (see below).

HOW THE GFC 700 AUTOPILOT WORKS

The GFC 700 flies through a Flight Director (FD) — a magenta guidance cue on the PFD — before the autopilot (AP) physically moves the controls to follow it. Press **AP** to engage; the FD appears automatically if it isn't already showing.

Lateral modes: HDG flies the heading bug you've set. NAV follows the G1000 flight plan. APR captures and flies a loaded approach.

Vertical modes: ALT holds the current altitude. VS holds a vertical speed you dial in. FLC holds an airspeed while climbing or descending.

Selecting a mode *arms* it first — it only engages once the arming condition is met (NAV, for example, arms immediately but only captures once you're close enough to the course).

Beginner tips: The magenta FD cue shows what the aircraft is about to do — if it looks wrong, don't wait for the autopilot to follow it, check your mode selection first. On the DA62, engine monitoring lives entirely on the MFD engine page, so glance there routinely instead of looking for separate gauges. And double-check your CDI source (GPS vs. NAV) before an approach — it needs to be set correctly for APR mode to capture properly.

SIMULATION USE ONLY. This tutorial explains general Garmin G1000 NXi / GFC 700 operation, framed around the Diamond DA62. The same core operation applies to every other G1000-equipped aircraft in this library (Cessna 182Q, Cessna T210N, Cirrus SR22T, Diamond DA40 NG). Not an official Garmin or Diamond training document — for real-world procedures, refer to the aircraft's POH and the Garmin G1000 Pilot's Guide.