

Cirrus Perspective (by Garmin) and “off the shelf” G1000

In some quarters it has been suggested that Cirrus Perspective is, “just the name Cirrus uses for the G1000.” Cirrus doesn’t think of it this way, nor do all the people who put in years of effort to engineer this new cockpit.

And maybe that is the real difference – Cirrus Perspective is a new cockpit (using Garmin avionics), not just an off-the-shelf avionics package.

Cirrus Perspective (the avionics components) uses many similar parts to G1000: the GPS modules didn’t need re-inventing; nor did the Garmin AHRS, Com/Nav radios and other such internals. What did need re-inventing was way you work with the avionics: what you touch and what you see; and, of course, how big you see it.



(Cirrus Perspective)

The table on the next page lists out where Cirrus Perspective has advanced the off-the-shelf G1000: physical changes, how you work with it and what it looks like.



(One size fits all G1000)

CIRRUS PERSPECTIVE		Garmin G1000	Notes
Display and Control Units			
General	All unique to Cirrus	Off-the-shelf or one size fits all	
PFD Display	Choice of 12.1 or 10.4 inch diagonal Bezel keys use mainly as backup/setup	10.4 inch diagonal Switches and buttons dominate bezels	Confusion factor
Synthetic Vision	Available Available on 12" screens	Optional or Unavailable Only available on 10" screens	G1000 Synthetic Vision availability varies On the 12.1 inch the text is much more visible
MFD Display	Choice of 12.1 or 10.4 inch diagonal Almost all bezel buttons/knobs are setup and backup (15 total)	10.4 inch diagonal Switches and buttons (39 total) fill the bezels and perform essential functions	Number of buttons can vary for G1000
Keyboard Controller	Standard Logically clustered (GNS 430 like) basic FMS controls HDG/CRS/ALT selectors fall to hand	Not always available FMS controls not even grouped together Somewhere on the bezel	
Autopilot Controller	Level "blue" button standard Yaw Damper (optional for SR22 & turbo) Logically clustered functions	Not Available Not Available Button sporadically placed	
Audio Panel	Conventional, easy to follow layout	Squeezed between screens. Very (very) unconventional	
Operations			
AHRS with Digital Autopilot	Dual - Robust and fault tolerant	Single – exposed to single failure	Dual AHRS (or equivalent) means single failure does not demand hand flying using only backup gauges
En-route	Most operations are done on keyboard	Reach to screens for most operations	Reaching inherits the risk of disorientation
Digital Autopilot	LVL button Controls fall to hand	No LVL button available Have to reach for controls	An answer to spatial disorientation Reaching increases risk of disorientation
Keyboard	Fall to hand	Keyboard not always available	Many major G1000 operations on bezels
Perspective EVS	Available (12" screens)	Not an option on any 10" screens	EVS: Enhanced Vision (infrared images for night operations)
Screen Layout			
General	Easy to read numbers Intuitive Com/Nav frequency tuning with keyboard/controller or bezel Traffic window in standard Cirrus layout % power (top left corner)	Technical look Not clear what is active/standby. Tune only on bezel Traffic window not available Top left duplicates MFD Nav	Slash through zero, etc.
PFD Display	Magnetic heading for wind direction (text with arrow) Transponder code easy to see and intuitive to change	Just a graphic for wind direction (just an arrow) Hard to find and change	
MFD Display	Destination information (top right) Topo information and Wx simultaneously Target fuel flow for Cirrus Turbo leaning	Top right duplicates Com from PFD Topo and Wx not allowed together Manual leaning	