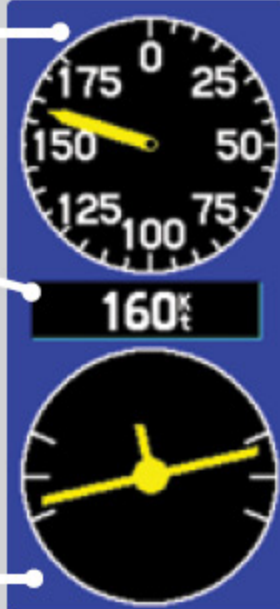


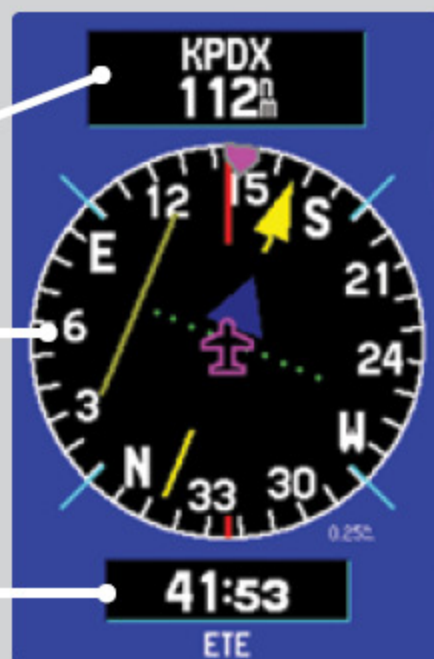
Dissecting Garmin's Virtual Panel

The "airspeed indicator" is really a conventional groundspeed readout. If you have any mental bandwidth remaining after losing your gauges, add or subtract the estimated wind to determine KIAS. Note the digital readout.



Garmin's "turn coordinator" depiction isn't what you're used to. For one thing, there's no way for a single GPS to measure yaw—and there's no inclinometer—so the traditional "step on the ball" procedure to establish coordinated flight can't be used here. Also, the device really is measuring the rate of heading change, so the relative bank angle depicted is a well-educated guess.

The virtual panel's center provides some traditional GPS-related information and some not-so-traditional. At the top is the fix to which you're navigating, with the distance remaining shown below. Meanwhile, Garmin's "virtual HSI" provides a pilot most everything he or she needs to know about the track being flown. In this instance, the airplane's track is roughly 166 degrees, while the desired track is approximately 145 degrees. The CDI is fully deflected, depicting the airplane right of course and maneuvering to intercept the desired track. At bottom is the estimated time en route to the next fix—KPDX, remember?—at the current groundspeed.



The altimeter presentation depicts GPS-derived msl altitude irrespective of barometric pressure. Missing from this "gauge" is a normal altimeter's third needle denoting 10,000 foot increments (and, of course, a Kollsman window). A digital readout is also included below the "altimeter."



Garmin's "vertical speed indicator" is one of the most accurate of the virtual instruments presented on the GPSMAP x96's emergency panel. It's so accurate it had to be "dumbed down" for this application. It measures the rate of change in GPS altitude. The symbol resembling a heading bug is a VNAV depiction.