

Symbology And Displays

In many things, bigger is better. So it is with multi-function displays, moving maps and the like. Put simply, larger display sizes translate to more and better-organized information, with greater detail and clarity, especially in high-workload situations. The need for clear, unambiguous symbology in cockpits should be obvious. That's one reason industry and regulators have agreed on standard symbology when displaying airborne traffic information. The table below details the symbol shapes and colors used when depicting traffic in the cockpit, whether derived from TCAS I/II, ADS-B's TIS-B service or TAS. However, some traffic technologies—notably early portable products—do not use this symbology, in part due to limited data on the potential conflict. Additionally, since only TCAS II provides RAs, you won't see a solid red square unless you're flying a TCAS II-equipped aircraft.

Type of Advisory		Symbol
Other	> 7000-foot altitude difference or > 7 nm range at CPA	White diamond
Proximate	> 1200-foot altitude difference and < 6 nm range at CPA	White diamond
Traffic Advisory	< 1200-foot relative altitude, < .2 nm at CPA, time to CPA < 45 seconds	Yellow circle
Resolution Advisory	Estimated miss distance < 750 feet, < .1 nm at CPA, time to CPA < 30 seconds	Red square

Meanwhile, the two images below—traffic displayed on a Garmin G1000 and on a GNS430W—should be all you need to know about whether your existing avionics are adequate for displaying TAS/ADS-B traffic imagery or if you should consider an upgrade.

