
TX56 NAV/COM - PRODUCT REVIEW



BETTER BY DESIGN - SLIMLINE

Trig Avionics is an established name in the certified avionics world. Every year more airplane owners are installing and flying with Trig. Customers are enthusiastic about Trig products, as innovative yet easy to use, with superior features.

Trig's latest offer is their TX56 Nav/Com. The company claim this is a significant product, on account of its slimline design and unique feature set. Trig can now offer a complete stack - consisting of an Audio Panel, Radio, Nav/Com and Mode S Transponder.



Measuring 33 mm in height the TX56 is the most space efficient Nav/Com on the market. The Garmin GNC 255 takes up more space at 42 mm tall. The TX56 is also shorter, lighter and has no need of cooling fans, as it runs efficiently.

Older Nav/Com units are becoming harder to support and more expensive to fix when they fail. This makes the TX56 either an ideal retro-fit or forward fit. The Nav/Com requires a dedicated Trig radio tray, but taking minimal space in the stack means installation is practical and easier. Trig's TX56 installation manual shows pin compatibility with legacy equipment, so this is a practical advantage when incorporating the Nav/Com with existing avionics in the aircraft. Trig also provides third party compatibility with other avionics for a more integrated stack.

PERFORMANCE ASSESSED

A Nav/Com uses radio beacon technology that is established and ubiquitous. The TX56 has all the expected core features of a VOR Navigator and VHF radio. However, the TX56 also has new and novel features, which make it easier to use and more capable, when compared to the GNC 255.

We liked the large **higher resolution display** - this clearly presents both Com and Nav information.

Pressing the COM or NAV button shifts the emphasis of the display, making it very clear when selecting frequencies and seeing identifiers in full daylight and at night. The unit has an automatic dimmer and can support an aircraft lighting bus.

The button interface is proven as it mirrors the tuning knobs used on Trig's popular TY96 VHF radio.

BETTER BY DESIGN - TRIG PRODUCT RANGE

A 'Push Step' feature allows you to toggle between 8.33kHz and 25kHz spacing. Trig claim this makes the radio faster to tune, which is credible - it's a simple feature and allowed us to get through the bandwidth quicker.



Dual Watch allows the monitoring of a second Com frequency - this is something that once you have tried, you really don't want to give up! For example, It's useful when listening to ATIS on the secondary frequency and monitoring ATC on the primary frequency. The primary frequency always takes precedence, so you really can communicate and monitor at the same time. Dual Watch is also possible on the Nav - making VOR navigation more accurate by generating a second position fix if desired.

The **PLAY button** allows the instant play back of up to 30 seconds of audio, saving the embarrassment of having to "Say again". Even some experienced pilots think this is a stand-out feature! Trig understands the pressures of being a GA pilot.

The TX56 uses Trig's **database feature** seen in the TY96. The company say customers like the freedom and zero cost of being able to create their own frequency database. The Nav/Com holds over 200 radio and 200 nav frequencies.



Whilst frequencies can be manually entered, the TX56 ships with a Trig USB stick. Instead, frequencies can be easily compiled on a computer and downloaded to the Nav/Com in seconds. This functionality allows each pilot to populate the radio with their own frequencies if this is required.

Frequencies are shown in the display with identifiers and corresponding services, such as TWR, GRD, ATIS etc.

PRACTICAL NAVIGATION

Using a Nav/Com remains part of the pilot training syllabus, is mandatory for IFR flight and remains a vital fall back if GPS systems fail. The TX56 provides powerful VOR and ILS capabilities, too.

When tuned, VOR identifiers are automatically displayed. The TX56 even has a digital CDI built into the main display, this can be used for VOR navigation. Trig also has a separate Course Deviation Indicator, the TI106 if an external CDI is required.



BETTER BY DESIGN - TRIG PRODUCT RANGE

Compatibility with EFIS screens and external displays is possible via a serial output (RS232 or RS485). This flexibility of integration with third party avionics is a positive advantage for installers and aircraft owners.



TRIG WARRANTY AND SUPPORT

Trig Avionics has been operating since 2004 and sells to 42 countries globally. This growth appears to have been possible not just through solid products but also professional customer support.

The company offers a two-year warranty that starts at installation, not purchase. Trig offer immediate service exchange and they will fix, repair or replace within 10 working days once the unit has arrived.

TX56 versus GNC 255

The established Nav/Com in the market is the GNC 255. This unit is physically larger when compared to the TX56. However, bigger may not be better?

Some customers may demand the subscription global database that the GNC 255 can host. This is one feature where Trig offers a different approach.

However, looking at the capabilities that a TX56 provides, a side-by-side comparison is compelling, with Trig taking a strong lead.

IN CONCLUSION

The Nav/Com remains a staple within a GA avionics stack. However, looking at the cost the GNC 255 is more expensive than the TX56, which has a typical list price of £ 3,690 ex tax, Trig wins the value war.

In conclusion, the slimline form factor of the TX56 is a genuine accomplishment. The really good news is that Trig has managed to fit a whole lot of practical features and capability into this smaller package. This makes it the first and most obvious choice when considering a new Nav/Com.

Feature	GNC 255	TX56
<i>Higher resolution display</i>	32 pixels	Yes - 48 pixels
<i>Faster tuning - push step</i>	No	Yes
<i>Favorite frequencies</i>	15 x	200 x
<i>Say Again</i>	No	Yes
<i>Frequency database</i>	Subscription required	Open / free
<i>Dual Watch</i>	Com	Com & Nav
<i>Height of radio</i>	42 mm	33 mm
<i>Built in CDI</i>	No	Yes
<i>Intercom/stereo</i>	Yes	Yes