

# BETTER BY DESIGN - TRIG PRODUCT RANGE



## THE DIFFERENCE IS TRIG

With an established record of designing highly innovative aviation products, Trig Avionics offers you the best mix of features, quality and value. Trig products are easy to install and use, with innovative features that are 'Better by Design'.

Trig is the popular choice amongst discerning pilots around the world. Trig offers both stack and compact avionics. This product overview shows the benefits of installing and flying with Trig.

## TX56 & TX57 NAV/COM



The **TX56 and TX57 Nav/Com**, highlights our 'Better by Design' philosophy. The slimline unit design is class leading at only 33mm tall and is shorter and lighter than competitors. With a clear, bright display and superior user interface, the TX56 has unique features that will appeal to both VFR and IFR pilots.

The TX56 is an ideal forward fit or upgrade for legacy nav/com models. The TX56 can be installed to replace KX155 and SL30 models. The slimline unit saves panel space, weight and needs no cooling fans. The TX56 can be used as a primary or secondary source of navigation.

The Dual Watch feature allows the nav to provide a secondary VOR for improved navigational accuracy. The Nav also has a built-in digital Course Deviation Indicator for VOR navigation. The nav can be configured with external CDI and EFIS systems, Trig has a dedicated CDI called the **TI106**, see next page.

Key features	Trig TX56	GNC 255
33mm Slimline case	✓	✗
Faster Tuning - Push Step	✓	✗
Say Again - repeat	✓	✗
Favourite frequencies/identifiers	X 200	X 15
Custom database facility	✓	✗
Stereo / 2 place Intercom	✓	✓
Compatibility with Garmin G3X systems	✓	✓
Built in digital CDI	✓	via flip-flop

## BETTER BY DESIGN - TRIG PRODUCT RANGE

Similar to the TY96 radio, the **TX56** is a 10 Watt model, the **TX57** is a 16 Watt / 28V model. Both are 8.33 and 25 kHz equipped with a memory for 200 com and 200 nav frequencies and identifiers. The TX56 will automatically identify each nav facilities morse and display the station name. The nav frequency database (once created) is uploaded and managed in the same way as the TY96 radio, using a Trig USB stick. Manual frequency input is possible too.

### TI106 - COURSE DEVIATION INDICATOR



Featuring the latest servo and LED lighting technology, for enhanced visibility **Trig's TI106** is the ideal certified Course Deviation Indicator. It is compatible with both new and legacy systems, and can be ordered with the TX56 Nav/Com.

### TY96 & TY97 - SLIMLINE VHF RADIOS



The **TY96 Radio** takes minimal height in the panel, at only 33mm tall the radio saves valuable space and eases installation. The TY96 is a 10 Watt model, the **TY97** is a 16 Watt / 28V model - both are 8.33 and 25kHz equipped. Non 8.33 kHz versions are available, these are the **TY96A** and **TY97A** radios.

The TY96 has an impressive display, and a simple to use interface. It provides up to three times faster tuning, via its unique 'Push Step' function. The radio features Dual Watch, to monitor two frequencies at the same time. Manual frequency selection is straight forward, using the dual right hand control knob. The radio can also connect to compatible GPS and EFIS units. This allows the automatic loading of en-route radio frequencies into the radio display.

Additionally, a custom frequency database can be created - this gives you control and saves the cost of a regular database subscription. A PC/MAC is used to create a CSV file, your database is then loaded via a USB stick into the radio in a matter of seconds.



The 'Say Again' button repeats the last transmission, so you don't have to miss a call and transmit 'say again'. These clever features reduce pilot workload and will save you money.

Key features	Trig TY96	GTR 225A
33mm Slimline case	✓	✗
Faster Tuning - Push Step feature	✓	✗
Say Again - repeat	✓	✗
Favourite frequencies	X 200	X 15
Custom database facility	✓	✗
Stereo / 2 place Intercom	✓	✓
Compatibility with Garmin G3X systems	✓	✓
Dedicated Emergency button	✓	via flip-flop

# BETTER BY DESIGN - TRIG PRODUCT RANGE

## TT31 - MODE S TRANSPONDER



The TT31 Transponder is a highly practical Mode S and ADS-B Out capable unit. Designed as a Mode S 'plug and play' replacement for legacy KT76A, KT76C and KT78A transponders. The TT31 can use the existing transponder tray, encoder, antenna and wiring saving time and expense.

The TT31 is future proof, adding a suitable GPS source makes the TT31 ADS-B Out, using 1090ES. This is the ICAO international surveillance standard for VFR and IFR flight. The TT31 benefits from a large, bright LED display with a simple user interface.

Key features	Trig TT31	Garmin GTX 335	Funke TRT 800A
Mode S - Plug & Play	✓	✗	✗
ADS-B to TSO-C166b	✓	✓	✗
Third party GPS compatibility	✓	✓	✓
Stopwatch / timer	✓	✓	✓
Altitude monitor	✓	✗	✗

## TMA44 & TMA45 AUDIO PANELS

Trig has two audio panels. The **TMA45** caters for aircraft owners looking for stereo audio and Bluetooth support, for music and mobile calls. This is

accompanied by industry leading noise reduction. The **TMA45** is a plug & play replacement for the GMA340.



With a one button push / one function philosophy Trig audio panels are easier to use. The **TMA44** is a mono audio panel. It provides great value, with all the core features required to support VFR and IFR operations in general aviation aircraft. Both panels include NAV, DME, ADF and Marker Beacon capabilities, plus inputs for auxiliary audio feeds.

Key features	Trig TMA45	Trig TMA44
Intercom capacity	2-6 seats	2-4 seats
Audio	Stereo	Mono
Music / Mobile phone	Bluetooth	Hard wired
Audio processing	Digital noise reduction	Smooth fade feature
Additional value	Plug/Play GMA 340	Great value for fleets

## TT21 & TT22 MODE S TRANSPONDERS



Trig's Mode S and ADS-B Out capable compact transponders are small and light weight. Occupying minimal panel space, the **TC20 Controller** gives class leading mounting options, creating space for other

# BETTER BY DESIGN - TRIG PRODUCT RANGE

avionics. The **TC20** is a clear, crisp display which can be mounted in a 57mm round hole or as a space saving compact mount. The transponder back box has its own certified mounting tray, usually installed away from the panel. The **TT21** is a 130 Watt, Class 2 model, the **TT22** is a 250 Watt, Class 1 model.

Both models meet the latest surveillance standard TSO-C166b. When paired with a GPS, such as Trig's **TN72, TN70** or **TN70A** GPS Position Sources they enable ADS-B Out, which is visible to all ADS-B In systems.

Key features	Trig TT21/22	Funke TRT 800	TQ KTX2S
Space saving mounting option	✓	✗	✗
Length in panel	52mm	160mm	146mm
ADS-B TSO-C166b	✓	✗	✓

Dual Watch allows the monitoring of two frequencies at the same time. Additional to the preset onboard radio channels, the **TY91** can also be connected to compatible EFIS/GPS systems. This allows the automatic loading of a frequency & identifier from a suitable EFIS navigator onto the TC90 display. Simply pressing flip-flop makes the displayed frequency active.

The **TC90 Controller** has a clear display, with illumination & dimming functionality. The radio also has a built-in speaker amplifier for non-headset use. A **TY91 Dual Control** option with two controllers is available for tandem aircraft and gliders.

Key features	Trig TY91/TY92	Funke ATR 833	TQ KRT2S
Space saving mounting option	✓	✗	✗
Length in panel	36mm	169mm	146mm
3 x Faster Tuning 'Push Step'	✓	✗	✗
Dual Watch	✓	✓	✓
GPS / EFIS Frequency Support	✓	✗	✗

## TY91 & TY92 VHF RADIOS



Small but proven, the Trig **TY91** radio is a 6 Watt compact model. The **TY92** is a 16 Watt high power version. Using the same 'space saving' design philosophy as Trig's compact transponders, the TY91 radio provides high quality communications with a built-in two place intercom. Features such as 'Push Step' significantly speeds frequency selection - allowing the pilot to shift between 8.33 and 25 kHz.

## TRIG ACCESSORIES

Supporting Trig products are a variety of GPS solutions, wiring harnesses and antennas for transponders, VHF radios and GPS units. All accessories are covered by Trig's comprehensive warranty, add them to your order.



---

# BETTER BY DESIGN - TRIG PRODUCT RANGE

---

---

## TN72 - GPS POSITION SOURCE

---

Using a certified **TN72 GPS Position Source** with a Trig transponder provides genuine safety benefits.

Mode S and ADS-B Out makes you visible to ATC, commercial, military aircraft and all ADS-B In traffic systems. If you use an uncertified GPS this could make you invisible to other aircraft. Some traffic receivers are designed to reject ADS-B Out data, when transmitted using an uncertified GPS.



Rather than compromising your safety - be seen and be safe - fit a TN72 to your Trig transponder. This is a highly affordable way to become ADS-B Out equipped, in voluntary airspace. The TN72 is certified to TSO-C199 and can support SIL 3/SDA 2.

Trig sells two complete Conspicuity Systems. The **TT22 ADS-B Bundle** is popular in the U.S. It contains a TT22 transponder, TN72 and TA70 GPS puck antenna (for LSA, homebuilt and experimental use).

The **TT21 Conspicuity Bundle** includes a TT21 transponder, TN72 and a TA50 GPS compact antenna. This is ideal where regulations permit, including voluntary ADS-B Out. The TA50 compact GPS antenna can be mounted on the cockpit coaming, where good visibility of the horizon is possible. Installations in high wing aircraft may require an external TA70 GPS antenna - but all items can be purchased individually to suit.



---

## TN70 / TN70A - GPS POSITION SOURCE

---

Aircraft owners of Part 23 aircraft wanting to fly in ADS-B Out mandated airspace will usually be required to install a TSO-C145 GPS Position Source.

Trig's **TN70 GPS Position Source** provides a convenient blind box upgrade for the TT31 or TT22 transponder, with an FFA ADS-B STC. The **TN70A** is an updated version, but identical in technical performance and form factor. Both the TN70 / TN70A are light weight, and can be installed away from the panel. This reduces the complexity and cost of installation. Each kit also contains a certified GPS antenna, called the **TA70**. This antenna complies with TSO-C190 and is designed as for new or easy retro-fit use, replacing an existing antenna. A free FAA ADS-B STC and comprehensive AML list is available, via qualified Approved Trig Dealers.

---

## TA10 - VHF ANTENNA

---



If you are looking for a top mounted VHF antenna then the **TA10 straight antenna** is a great solution. Designed to provide the best performance when paired with a Trig radio.



---

## BETTER BY DESIGN - TRIG PRODUCT RANGE

---

The **TA10 straight** antenna is usually mounted to the upper fuselage of an aircraft. Certified to FAA TSO C37d and C38d, this makes it suitable for use in many GA types including normal and high-performance aircraft.

---

### TA17 - VHF ANTENNA

---



The **TA17 angled** antenna offers pilots a certified antenna to pair with Trig VHF radios. The typical installation for this type of antenna is on the underside of low-profile aircraft, such as tail-wheel types. The antenna is certified to FAA TSO C37d and C38d, like the TA10 it can be used in many GA aircraft including high-performance models.

---

### TA12 - TRANSPONDER ANTENNA

---



The **TA12 'rod and ball'** antenna is designed to give solid transponder performance and is certified to FAA TSO C74c. Neat and compact the **TA12** antenna is ideal for a variety of applications across light aviation. The **TA12** is lightweight, simple to install and a good match for any Trig transponder.

---

### TA14 - TRANSPONDER ANTENNA

---



The **TA14 transponder 'blade'** antenna is designed to partner with any Trig transponder for optimum performance in certified GA aircraft. It has been designed with longer screws to create flexibility in installation on both composite and metal skinned aircraft. The **TA14** can also be used as a DME antenna, it is certified to FAA TSO C66c and C74c.

---

### MAKING INSTALLATION EASIER

---

Approved Trig Dealers are experts who have access to a range of accessories to make your Trig installation easier to complete.

**Wiring harnesses** for compact transponders and compact radios pre-wired harnesses are available in 1m or 3m lengths. These save time and simplify installation. Transponder harnesses include the option of adding wiring for the TN72 GPS. Trig recommends that any Mode S transponder, upgrade or new installation should have ADS-B Out added to secure the safety benefits of ADS-B.

For more information and to find your nearest Approved Trig Dealer visit [www.trig-avionics.com](http://www.trig-avionics.com)

Certified  
Safer

TRIG