TRIG STACK INSTALLATION - DEALER REVIEW



INTRODUCTION

Brian Cooker of Cooker Enterprises recently finished his first installation of a complete Trig Stack. He shares the installation experience and the reaction of his customer, in this dealer review.

The Trig Stack consists of a TMA44 Audio Panel, TX56A Nav/Com, TY96A VHF Radio and a TT31 Mode S Transponder. Brian works in aircraft maintenance but he also has experience of avionics installation, on a wide variety of general aviation types.

How did you first hear about the Trig Stack?

I became aware of the Trig product line via Trig's distributor, EDMO. The slim-line aspect of the stack was particularly interesting to me. The amount of real estate available on most panels is very limited. Trig's slimline option takes up less space, giving more room for other avionics and this was very appealing! The information I read was very impressive and I recommended Trig to several owners interested in new radios. The price, performance, and size were important selling points. One owner baulked at buying Trig, as he had no knowledge of the brand, going instead for some older used equipment. From my personal experience, this is a temporary remedy and arguably a false economy. Older equipment may be time tested but it is OLD and parts are getting harder to find. When they ultimately wear out and fail, they are worthless.

What was the customer aircraft and the avionics being replaced?

My customer owns a 1962 Piper PA-28-160 and had an absolutely chaotic and ancient avionics suite, most of it marginally operational. This equipment consisted of: a VAL Comm 760, KMA-20, KX-155, KT-76A, KI-209 and a Sigtronics SPA-400 intercom system.

What were the features and benefits that made the Trig Stack your customers top choice?

I can't say what the most important feature was but, in no particular order - Price, every owner I work with has a limited budget. The Trig stack is very competitive. Availability, many new systems are on back order or just not available. My contact at EDMO assured me that all the radios, with one exception, were 'on the shelf' and the one exception would be available in a few weeks. This fitted our schedules just fine. Size, weight, and performance. New technologies promise a life span of many years. Although I tried to impress upon my client that she was getting state of the art avionics, I don't think she fully understood what I meant until she read the pilot's handbook. It was an eye opener!

What type of flying was the customer doing?

Although my client is instrument rated, she flies mostly VFR. When she flies IFR, it is only in 'light' conditions.

Tell us about installation documentation, what were your observations?

This was the first time I had the opportunity to install a complete Trig stack, I reviewed the various manuals

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individually. I noticed some slight variations in style and format, but nothing that detracted from the installation. The interface with existing systems/wire harnesses in the aircraft was fortunately minimal.

I'm sure professional avionics shops prefer to 'gut' the aircraft of old wires and I did so whenever practicable. I did manage to make some mistakes, most notably, the power and ground connections for the TX56A. In flipping through the diagrams, I used one that showed the power and ground pins separately from the main 44-pin connector. I connected these pins to the 25-pin connector which, of course, did not work.

After several e-mails to Trig Customer Support, this issue was resolved. I have to mention perhaps the greatest aspect of this installation process for me was the outstanding technical support I received to answer my questions. The immediate, concerned and helpful responses gave me the assistance I needed.

Talk us through the key stages in the installation?

After reviewing the manuals, I began with the main power and ground wire pin-outs. The TI-106 CDI was the first full harness I built up. Each new harness was built up on the bench and tested for continuity. Since the systems were interconnected, the harnesses and connectors were not secured to the back plates until the trays were mounted. New circuit breakers were used and locations had to be found on the old a/c panel. The trays were test fitted and mounted on the exiting radio column. The connectors were mounted in the back plates and power/ground checks were done without the radios installed in the trays. Post installation checks were done after 'the lights came on'.

Are there any other aspects of the installation process that you would highlight?

I thought everything was clear and concise. I had every confidence that all would go well. My own oversight, mentioned above, was the only stumbling block. It was fairly simple, and using only the same company's documents was helpful. Just do as much preparation as possible on the bench and study the manuals carefully. I would like to see some sort of consolidated wiring diagram with a complete Trig stack as the primary installation, not the more common one or two upgrade type jobs.

In what ways did the new Trig stack exceed expectations in features, functions or looks?

The customer is incredibly pleased. The features available far exceeded my client's expectations. For instance, she was not aware of the capability to interface with panel mount GPS equipment. The cost and value of the Trig stack is a tremendous plus. I think this was a deciding factor, followed closely by my confidence that the Trig stack was a high-quality product.

What aspects of Trig products do you recommend to others and why?

I highlight cost, performance, and availability. Product support is often overlooked, or not even mentioned, but when you need it, it can be a frustrating thing if you cannot get help. Again, Trig Customer Support rates my highest praise and gratitude for their service.

PLAN YOUR TRIG STACK INSTALL

We are grateful to Brian for his review of the Trig. Please use this case study as a catalyst to plan your own future customer Trig installations. More aircraft owners can benefit from a space saving Trig Stack that is competitive, high quality and feature rich.

enquiries@trig-avioncs.com www.trig-avionics.com

