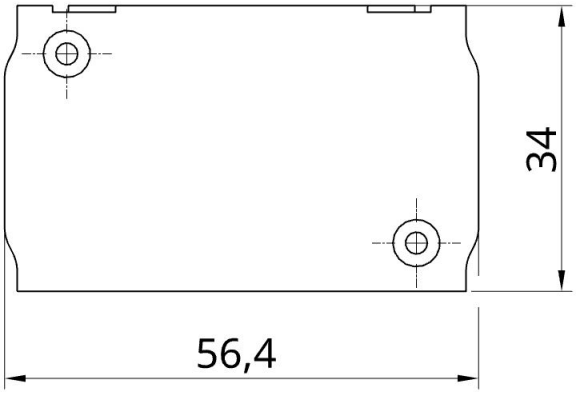
# TRIG TY96/TY97 Adapter BLE Bluetooth

# SkyDemon (SD) EXPERIMENTAL




Bluetooth Low Energy (BLE) adapter for a **TRIG TY96/97** VHF transceiver (aviation radio).
The adapter was developed as an interface between a TRIG TY96/97 and the navigation software SkyDemon (SD). It facilitates data transfer between the navigation software (SD) and the radio hardware (BLE <-> RS-232). The adapter is simply mounted between the device's tray and the existing TRIG connector.
No additional power supply is required. The adapter operates on 12 V or 24 V aircraft power. A self-resetting fuse is integrated into the housing. The power supply is protected against reverse polarity and is short-circuit-proof.
An existing control unit (EFIS, Garmin G3X, etc.) connected to the radio remains fully functional.

No further electrical work required!

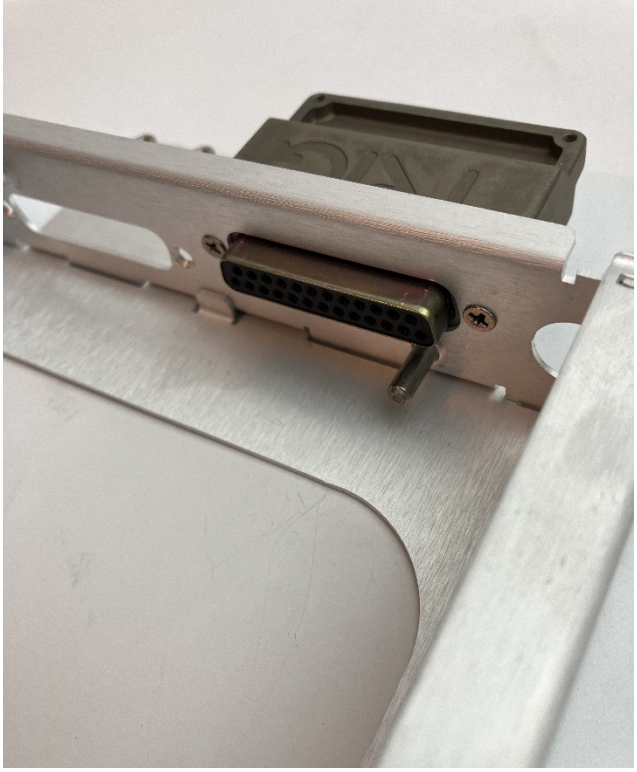
Please note: **This is a prototype for experimental use only !**

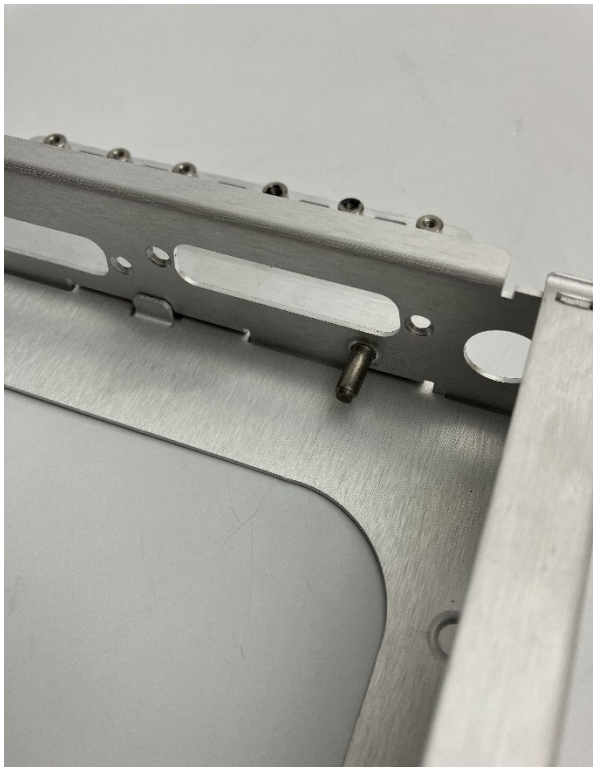
# 1. Adapter Installation

**The adapter is delivered with the following accessories:**

- 2 × countersunk screws 3 × 8 mm (for thermoplastics), Phillips head
- 2 × retaining clips
- 2 × screws UNC 4-40

## 1.1 Removing the TRIG connector from the tray

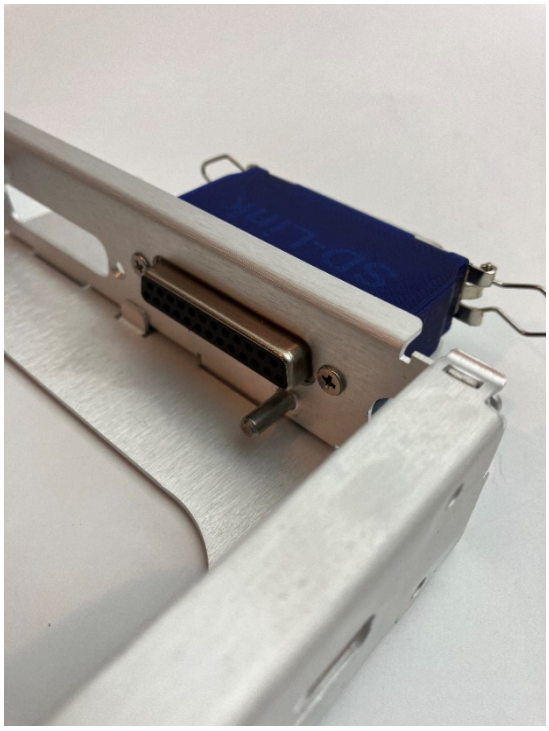




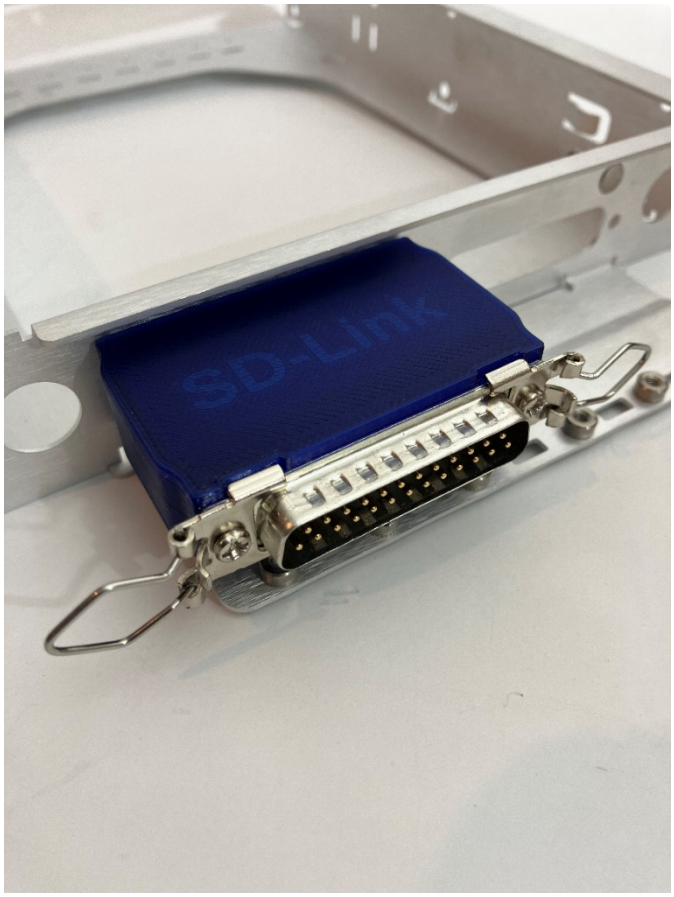
1. Remove the two Phillips screws to detach the TRIG connector from the radio's mounting tray.

2. Clean any dirt or debris that may have accumulated between the connector and the tray.

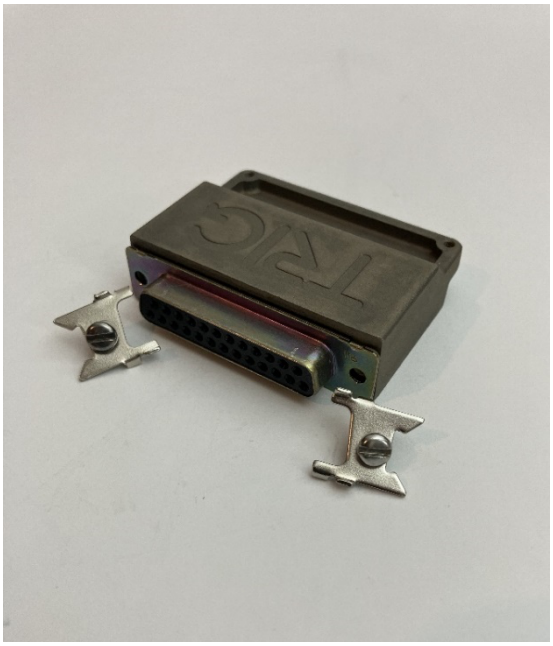
### 1.2 Installing the SD-Link TY96-DS Adapter into the tray

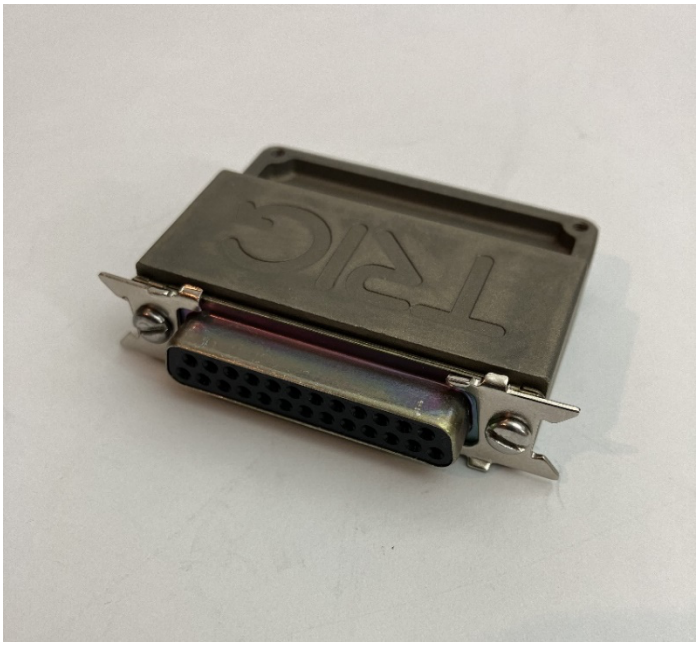



3. Install the SD-Link TY96-DS adapter into the tray using the supplied 2 × countersunk Phillips screws (3 × 8 mm, for thermoplastics).Tighten the screws gently by hand and be careful not to overtighten or strip the threads!



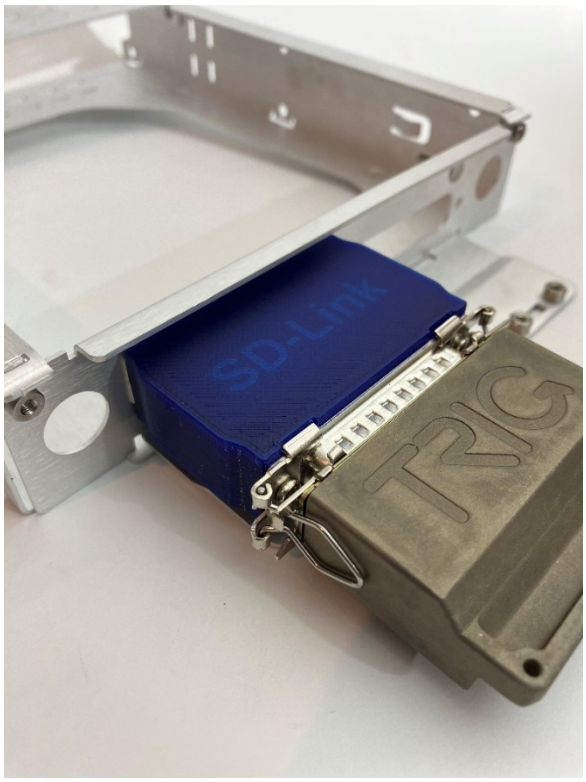
### 1.3 Attaching the retaining clips to the original TRIG connector

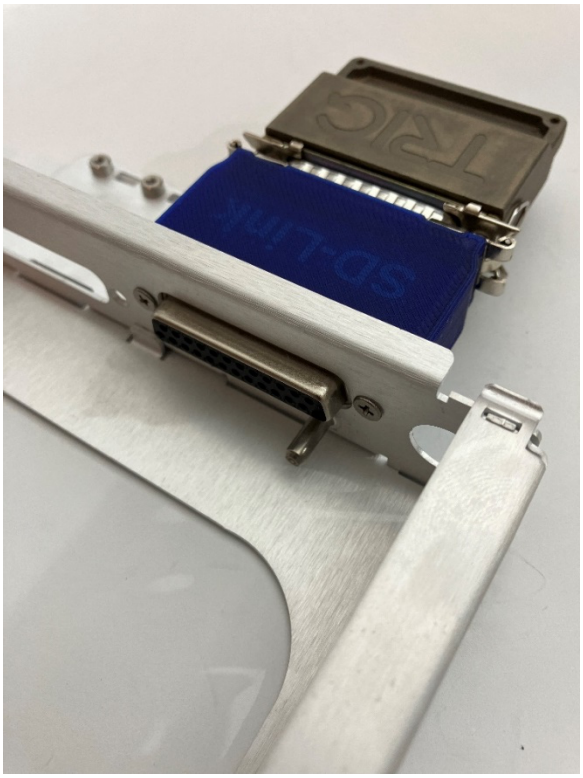



4. Attach the included retaining clips to the TRIG connector using the 2 × UNC 4-40 screws. Tighten with a flathead screwdriver.

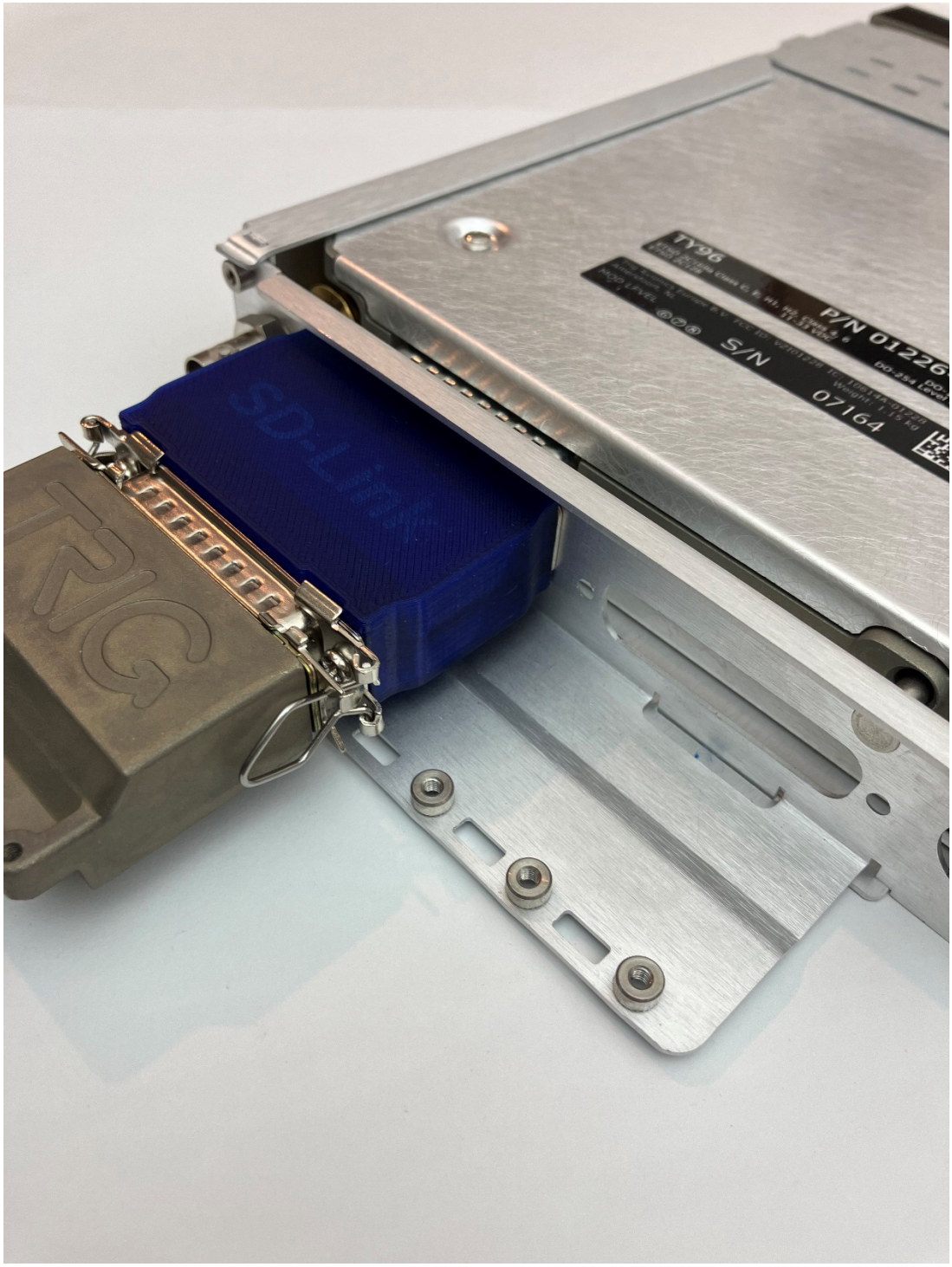
### 1.4 Connecting the TRIG connector to the adapter




5. Connect the SD-Link TY96-DS adapter to the TRIG connector by joining the adapter's clips with the mounted retaining clips on the TRIG connector.

6. (Optional) Secure the connection between the SD-Link TY96-DS adapter and the TRIG connector using a cable tie.
7. Ensure all connections are tight and secure.

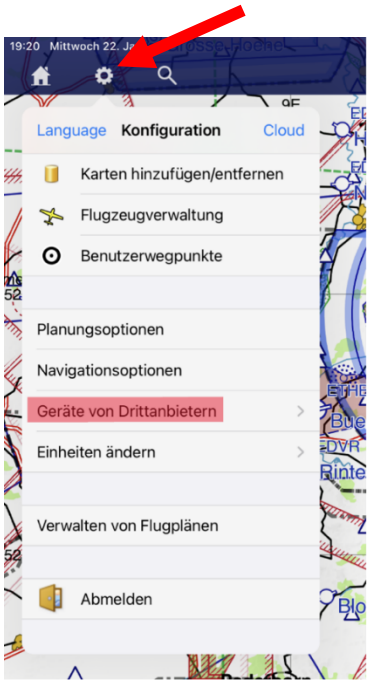


## 2. Radio Configuration

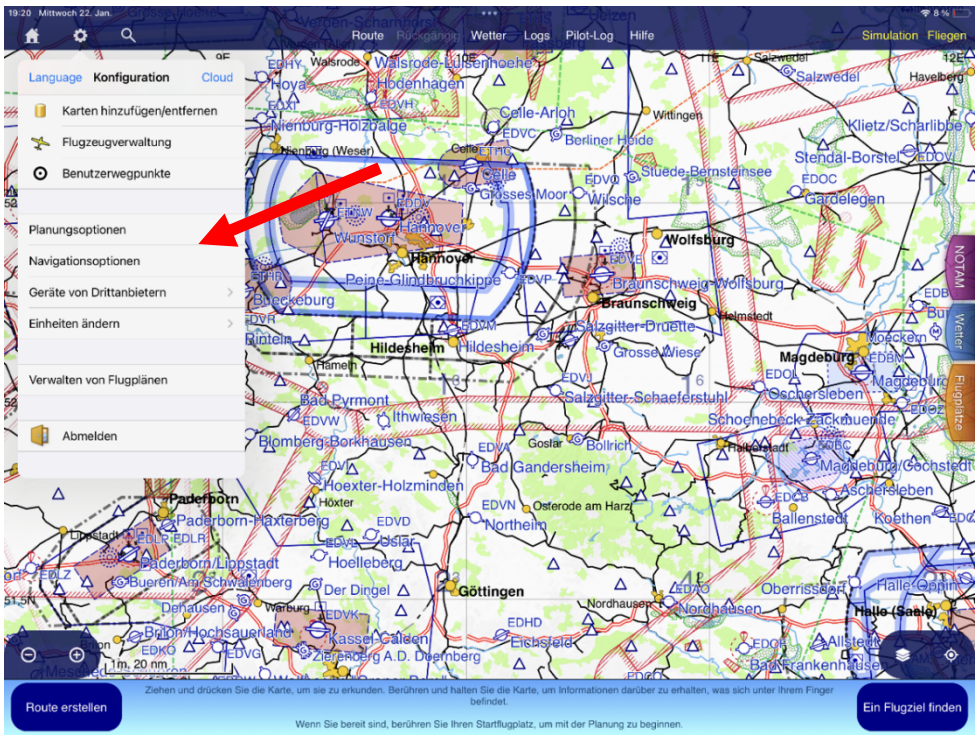
No further configuration of the radio is required.

## 3. Configuration in SkyDemon

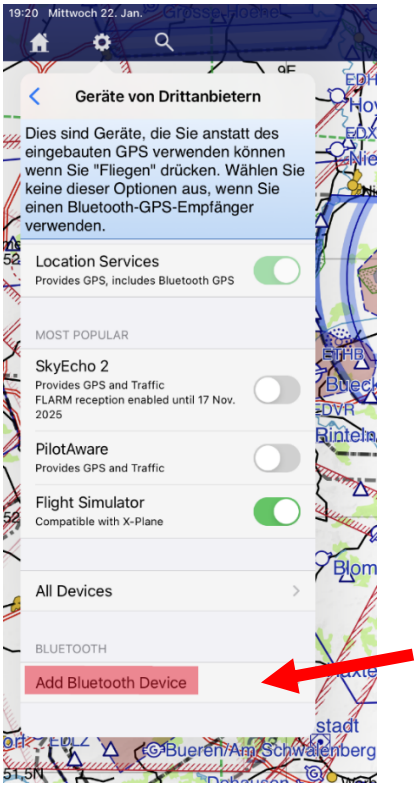
a. Open the configuration menu via the gear icon.




b. In the configuration, select “Third-Party Devices.”

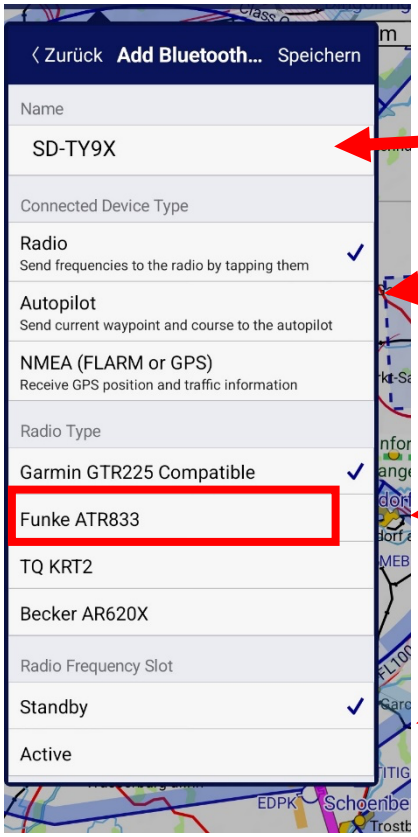


c. In “Third-Party Devices,” choose “Add Bluetooth Device.”




d. SkyDemon will now search for new Bluetooth BLE devices – this may take a moment. Once the search is complete, a list of found devices will be shown. Select the entry **SD-TY96-DS .**

e. Configure the adapter as follows:



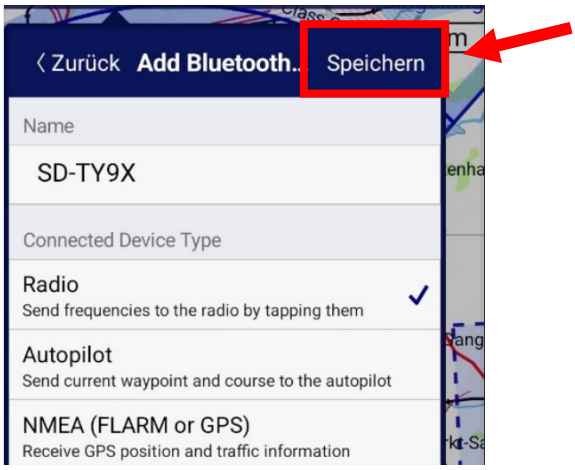

Editable name field: Choose a name for your adapter

Device type: Radio

Radio type: Select Garmin GTR225 Compatible (TRIG TY96/97 is not listed as a standalone device type).

Choose whether the Standby or Active frequency should be set

**f. And most importantly: Don't forget to SAVE – otherwise all settings will be lost!**




## 4. Connector Pinout

This is an excerpt from the official TRIG installation manual:

### *5.4 Electrical Connections*

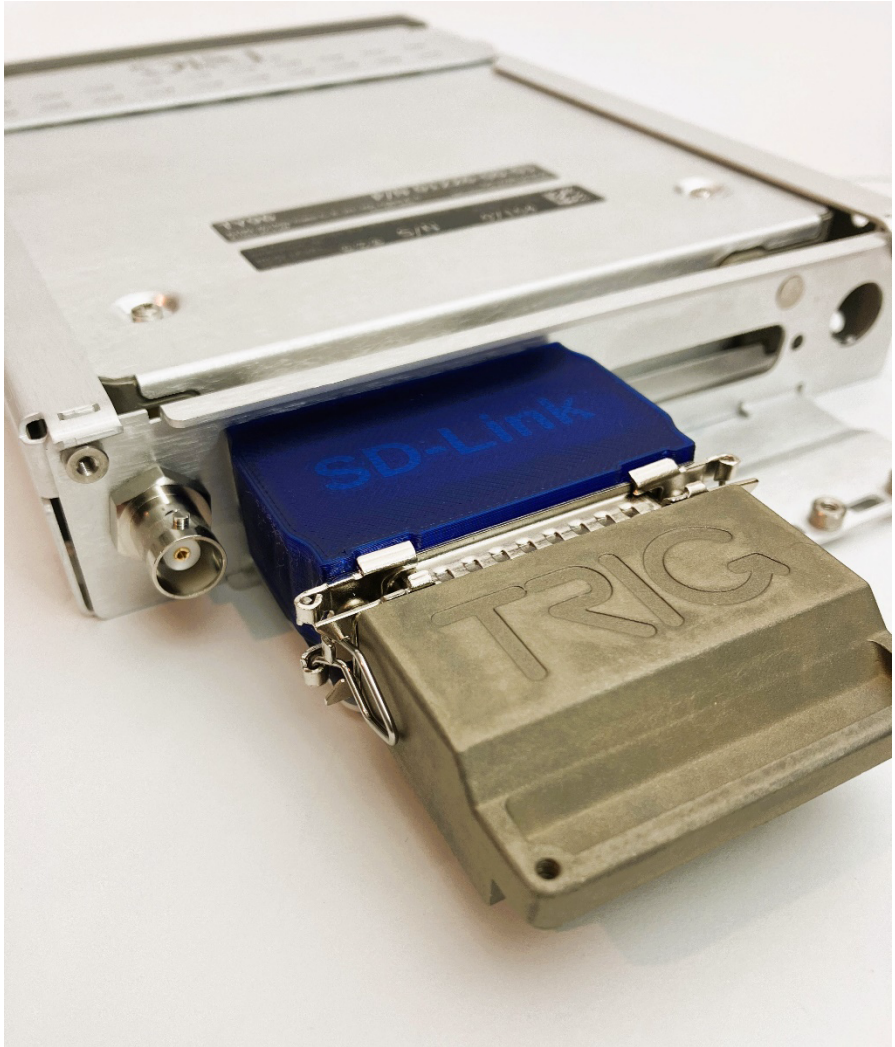
The TY96 has single 25 way D-type connector which is used for all the data and audio signals. A single coaxial BNC is used to connect the antenna.

| Pin | Signal | Direction |
|---|---|---|
| 1 | Speaker Out | Output |
| 2 | Headphone 1 Left Out | Output |
| 3 | Headphone 1 Right Out | Output |
| 4 | Ground | - |
| 5 | Headphone 2 Left Out | Output |
| 6 | Headphone 2 Right Out | Output |
| 7 | Audio Out | Output |
| 8 | Lighting Bus In | Input |
| 9 | Ground | - |
| 10 | Transmit Interlock In | Input |
| 11 | RS232 Out | Output |
| 12 | RS232 In | Input |
| 13 | Aircraft Power (DC) | - |
| 14 | Aux Audio | Input |
| 15 | Music Audio Left In | Input |
| 16 | Music Audio Right In | Input |
| 17 | Ground | - |
| 18 | Microphone 1 | Input |
| 19 | Microphone 2 | Input |
| 20 | Reserved | Input |
| 21 | Remote Flip-Flop | Input |
| 22 | Intercom Key | Input |
| 23 | PTT1 | Input |
| 24 | PTT2 | Input |
| 25 | Aircraft Power (DC) | - |

## 5. Contact

For issues, questions, suggestions, or positive feedback, please contact:

**LayCom Vision GmbH -** SD-Link
**Michael Hoffmann**
**Chausseestr. 46**
**D-15518 Rauen**

**Germany**

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