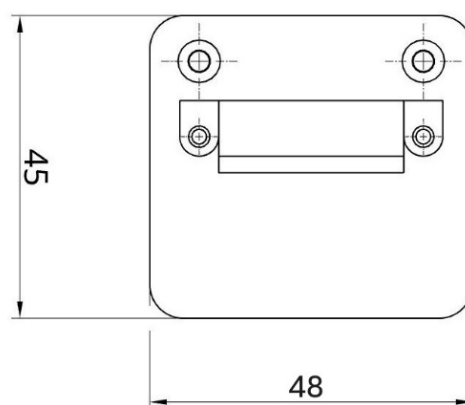


TRIG TY91/TY92 (TC90) - Adapter BLE Bluetooth

vfrNav EXPERIMENTAL



Bluetooth Low Energy adapter (BLE) for a TRIG TY91/92 VHF transceiver (aviation radio).

The adapter was developed as an interface between a TRIG TY91/92 and the navigation software vfrNav. It realizes the data transfer between the navigation software (SD) and the hardware of the TC90 control head of the radio (BLE ↔ RS-232). The adapter simply plugs into the existing wiring to the TC90 control head and is held securely to the housing by two knurled screws.

No additional power supply is necessary. The adapter can be operated with 12 V and 24 V aircraft voltage. An internal mini-fuse (125 mA) is integrated in the housing.

The power supply is protected against reverse polarity and short-circuit proof.

A control unit already connected to the TC90 (EFIS, Garmin G3X, etc.) remains functional.

No further electrical or mechanical work required!

Important: This is a prototype for experimental use only!

1 Radio Configuration

No further configuration is required on the radio.

2 Firmware Requirements

The adapter works from firmware 1.5 of the TC90 control head onwards.



The current firmware version appears briefly after power-on. It should show at least **Controller v 1.5**.

3 Connector Pin Assignment

This is an excerpt from the TRIG installation manual:

5.7.1 TC90 Interface - Pinout

Pin	Signal	Direction
1	Ground	-
2	TMAPA	Bidirectional
3	TMAPB	Bidirectional
4	Ground	-
5	RS232 Tx	Output
6	RS232 Rx	Input
7	Ground	-
8	Remote ON	Output
9	Power IN	Input
10	Power Ground	-
11	Reserved	-
12	Step Button	Input
13	Transfer Button	Input
14	Reserved	-
15	Reserved	-

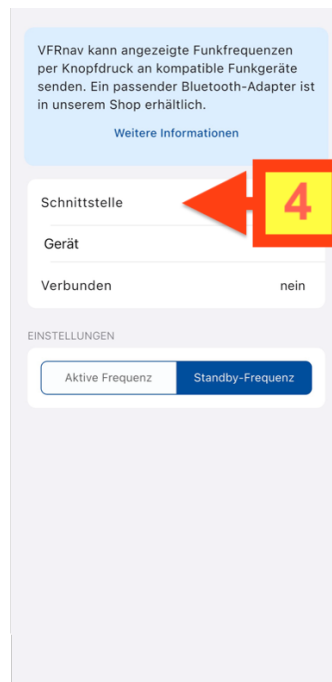
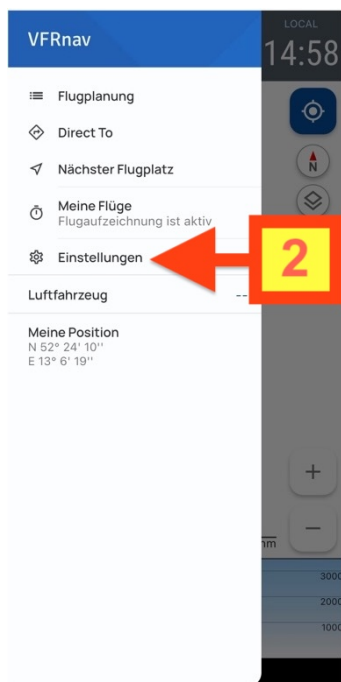
Figure 1: Pin assignment TRIG TY91/92 TC90

4 Configuration in vfrNav

Important: The adapter is not connected via regular Bluetooth settings. BLE devices are usually not displayed there.



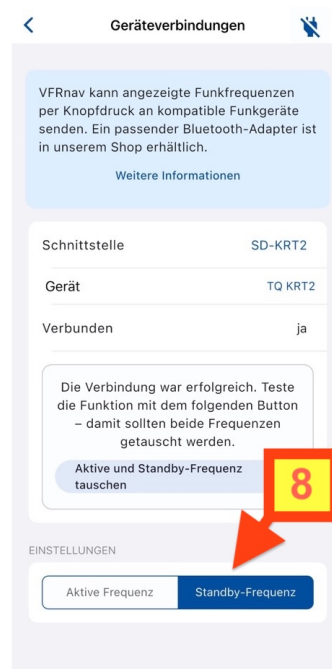
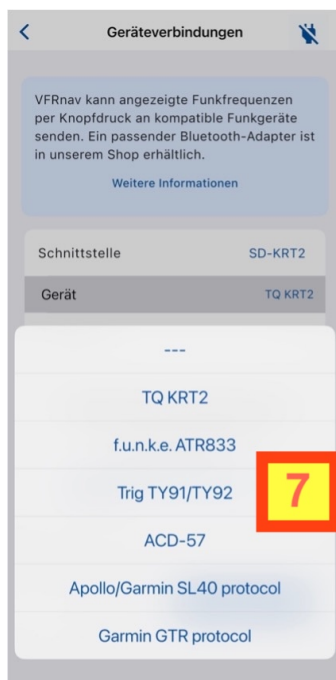
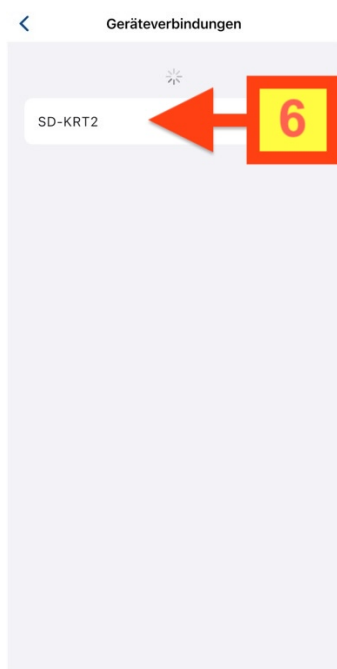
- Switch on aircraft power, turn on the radio.
- Enable Bluetooth on your phone/tablet.
- Start vfrNav.
 1. Open menu
 2. Open settings menu
 3. Under Device connections → Radio
 4. Select interface





5. Enable Bluetooth if necessary
6. Select the name of the found adapter: **SD-TYX**
7. If the protocol was not automatically detected, please adjust it under „Gerät" anpassen.
8. In the connection settings, specify whether the frequency should be transmitted to the radio immediately as active or as standby.

Important Notice: Check under „Verbunden": It should say „ja" stehen.



5 Contact

If you have any questions, problems or feedback, please contact us:

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