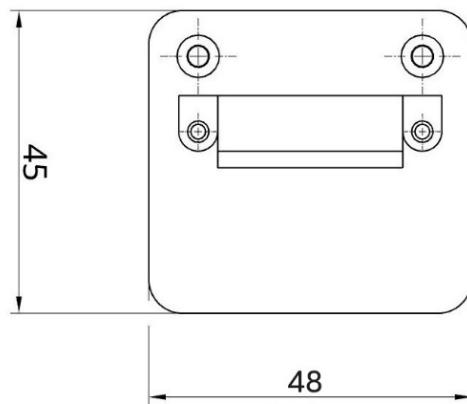




TRIG TY91/TY92 (TC90) - Adapter BLE Bluetooth

SkyDemon (SD) 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 SkyDemon (SD). 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

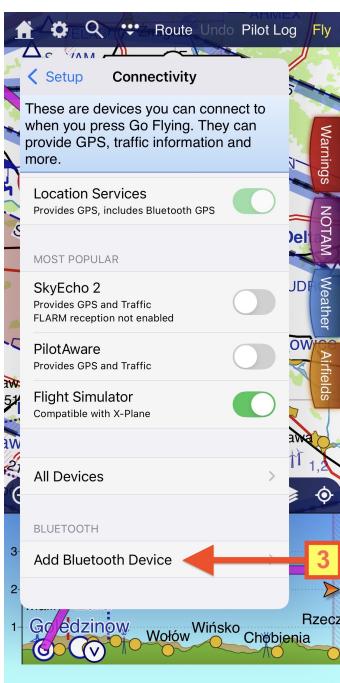
4 Configuration in SkyDemon

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

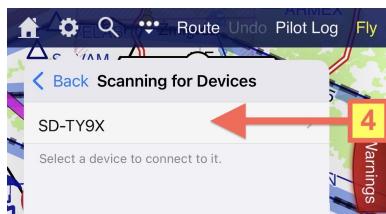


1. Open the configuration menu via the gear icon.

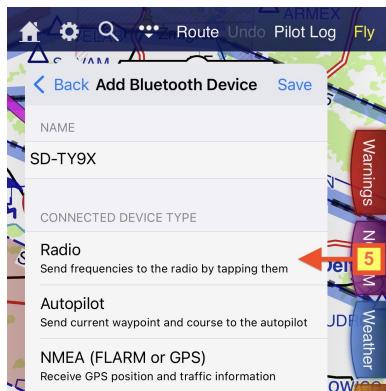
2. Select *Connections* in the configuration.



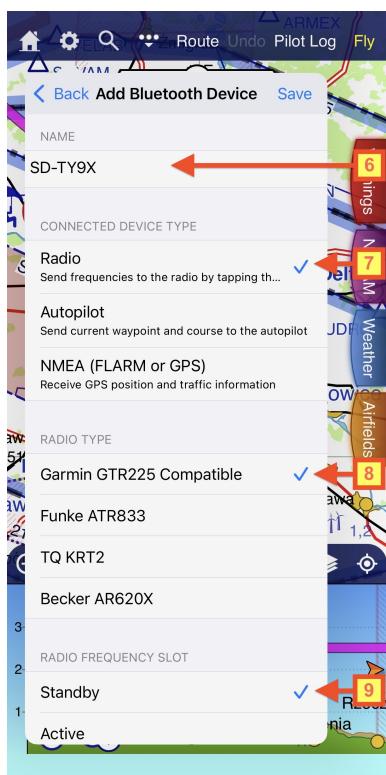
3. In *Connections* select *Add Bluetooth Device*



4. Wait until the search for BLE devices is complete (this may take a moment). Then select the entry **SD-TY9X-E**



5. Select the device type **Radio**.



6. The adapter name can be customized as desired.

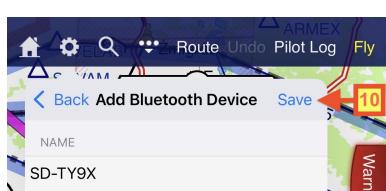
7. The device type **Radio** must be selected.

8. Select the radio type **Garmin GTR225 Compatible**.

Note: The TRIG TY91/92 is not listed as a separate device type in SkyDemon.

9. Choose whether the Standby or Active frequency should be set.

10. **Save the settings** - the adapter is now ready for use.





5 Contact

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

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