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 enables data transfer between the navigation software (SD) and the control panel TC90 of the radio (BLE <-> RS-232). The adapter is simply plugged into the existing wiring to the TC90 control panel and is held in place by two thumb screws attached directly to the housing.

No additional power supply is required. The adapter can be powered with either 12 V or 24 V aircraft voltage. An internal mini fuse (125 mA) is integrated into the housing. The power supply is protected against reverse polarity and is short-circuit-proof.

Any control unit already connected to the TC90 (e.g., EFIS, Garmin G3X) remains fully functional.

No additional electrical or mechanical work required!

<u>Please note:</u> This is a prototype for experimental use only !!!

1. Configuration of the Radio

No additional configuration of the radio is necessary.

The adapter works with firmware version 1.5 or higher of the TC90 control panel.

The current firmware version is briefly displayed after power-on.

It should read at least: "Controller v1.5".



2. Configuration in SkyDemon

Open the configuration menu via the gear icon.



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b. In the configuration, select "Third-Party Devices".



c. Under "Third-Party Devices" \rightarrow select "Add Bluetooth Device".



- d. SkyDemon will now search for new Bluetooth BLE devices this may take a moment...
 Once scanning is complete, the found devices will be listed.
 Select the entry: SD-TY9X
- e. Configure the adapter as follows:



f. And now VERY IMPORTANT: Don't forget to save – otherwise EVERYTHING will be lost!!!

Zurück Add Bluetooth. Speichern	m
Name	
SD-TY9X	enha
Connected Device Type	
Radio Send frequencies to the radio by tapping them	
Autopilot Send current waypoint and course to the autopilot	Gang
NMEA (FLARM or GPS) Receive GPS position and traffic information	kt-Sa

3. Connector Pinout

This is an excerpt from the TRIG installation manual:

5.7.1 TC90 Interface - Pinout

Pin	Signal	Direction
1	Ground	-
2	ТМАРА	Bidirectional
3	ТМАРВ	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	-

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4. Contact

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

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