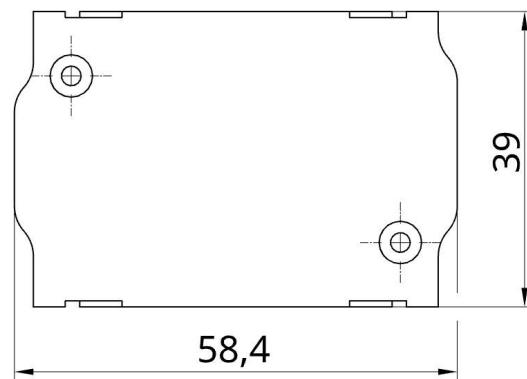




f.u.n.k.e ATR833 Adapter BLE Bluetooth

vfrNav EXPERIMENTAL



Bluetooth Low Energy adapter (BLE) for a f.u.n.k.e ATR833 VHF transceiver (aviation radio). The adapter was developed as an interface for a f.u.n.k.e ATR833 to the navigation software vfrNav. It implements the data transfer between the navigation software (SD) and the radio hardware (BLE \leftrightarrow RS-232). The adapter simply connects to the radio.

No additional power supply is required. The adapter is powered through the radio. A self-resetting fuse is integrated in the housing. The power supply is protected against reverse polarity and short-circuit proof.

No further electrical work necessary!

Important: This is a prototype for experimental use only!

1 Radio Configuration

No further configuration is required on the radio.

2 Connector Pin Assignment

This is an excerpt from the f.u.n.k.e installation manual:

MIC-R-GND	14	1	LSP(+)
/PTT-L	15	2	HEAD(+)
LSP(-)	16	3	HEAD(-)
/PTT-R	17	4	EXT-NF
MIC-R-STD	18	5	MIC-R-DYN
MIC-L-STD	19	6	MIC-L-GND
AUTO-ON	20	7	INTERCOM
DATA-GND	21	8	MIC-L-DYN
DATA-TX	22	9	DATA-RX
LCD-LIGHT	23	10	(leave open)
SW-12V-OUT	24	11	+12V-PWR
GND	25	12	+12V-PWR
		13	GND

D-SUB Connector Female
seen from solder side

Figure 1: Old Version (ATR833)

4.7.2 Connector – Pin Allocation

MICR GND	14	1	LSP (+)
PTT0	15	2	HEAD0 (+)
LSP (-)	16	3	GND (HEAD0)
PTT1	17	4	EXT NF
MICR STD	18	5	MICR DYN
MICL STD	19	6	MICL GND
HEAD1 (+)	20	7	INTERCOMSWITCH
GND (HEAD1)	21	8	MICL DYN
DATA TX	22	9	DATA RX
do not connect	23	10	do not connect
+5VDC (TO REMOTE)	24	11	BATT (+) (14/28V)
BATT (-)	25	12	BATT (+) (14/28V)
		13	BATT (-)

D-SUB Connector 25 Pin Female
seen from solder side

Figure 2: New Version (ATR833-II)



Pin	Names	Functionality
1	LSP(+)	Output external Loudspeaker Positive
2	HEAD-0 (+)	Output Headset-Speaker Positive
3	GND (HEAD-0)	Output Headset-Speaker Negative
4	EXT-NF	Input external Audio-Signal
5	MIC R DYN	Input Microphone Right Dynamic
6	MIC L GND	Input Microphone Left Ground
7	INTERCOM SWITCH	Intercom Activation Switch (connect to ground for Intercom activation)
8	MIC L DYN	Input Microphone Left Dynamic
9	DATA-RX	RS232 Receive (for Remote Control)

10	do not connect	Pin 10 is used by adapters for device identification
11	+14 / +28V-PWR	Input Power Supply +12V
12	+14 / +28V-PWR	Input Power Supply +12V
13	BATT (-)	Ground Side of Power Supply
14	MIC R GND	Input Microphone Right Ground
15	PTT-0	Push-to-Talk 0 (connect to ground for transmitting)
16	LSP(-)	Output external Loudspeaker Negative (Not identical to ground!)
17	PTT-1	Push-to-Talk 1 (connect to ground for transmitting)
18	MIC R STD	Input Microphone Right (Headset 1)
19	MIC L STD	Input Microphone Left (Headset 0)
20	HEAD 1 (+)	Output 1 Headset-Speaker Positive
21	GND (HEAD 1)	Output 1 Headset-Speaker Negative
22	DATA-TX	RS232 TX (for Remote Control)
23	N/A	do not connect
24	+5VDC OUT	5VDC Power Supply for Remote Control
25	BATT (-)	Ground Side of Power Supply

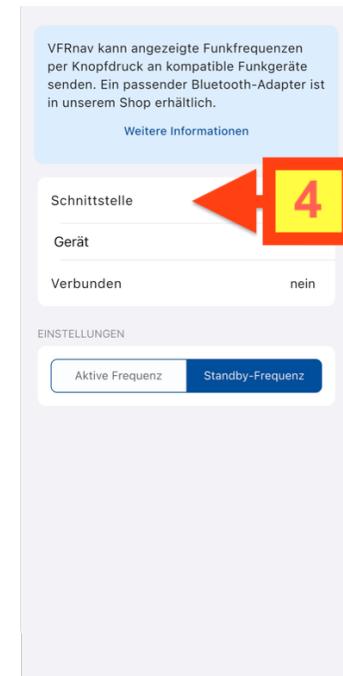
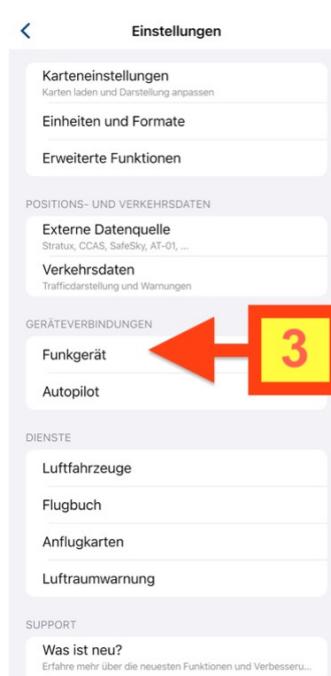
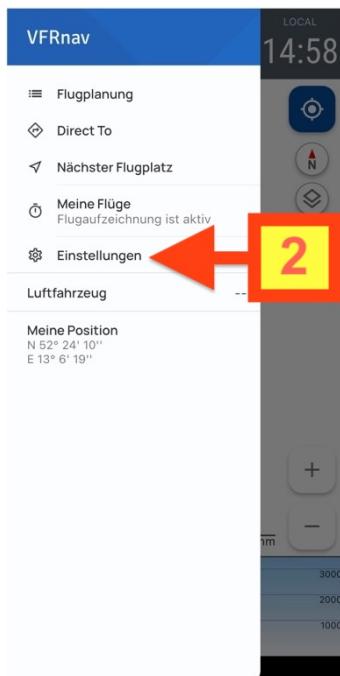
3 Configuration in vfrNav

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.

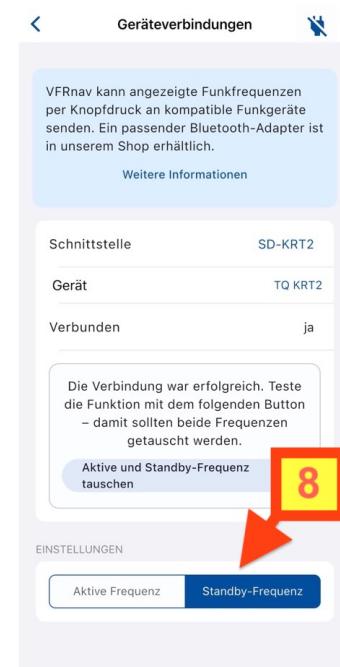
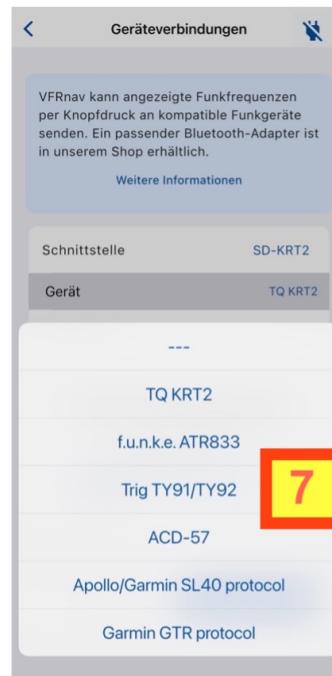
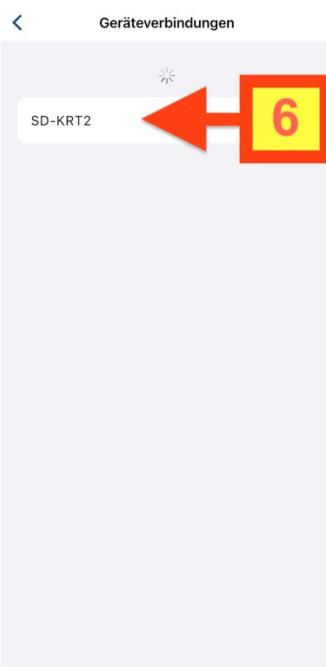
1. Open menu
2. Open settings menu
3. Under Device connections → Radio
4. Select interface





5. Enable Bluetooth if necessary
6. Select the name of the found adapter: **SD-ATR833**
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.



4 Contact

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

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