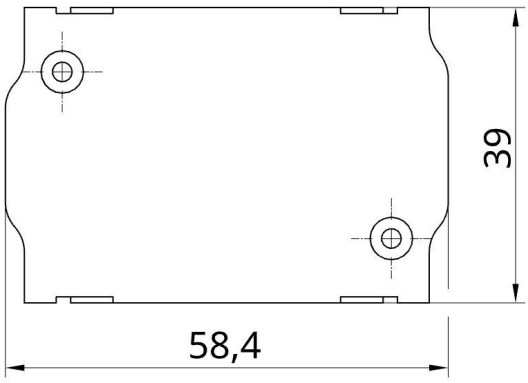
f.u.n.k.e ATR833 Adapter BLE Bluetooth

sky-map 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 sky-map. It implements the data transfer between the navigation software (SD) and the radio hardware (BLE ↔ 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:

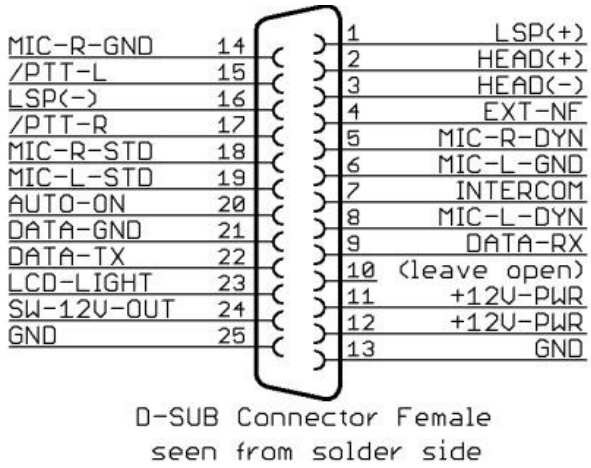


Figure 1: Old Version (ATR833)

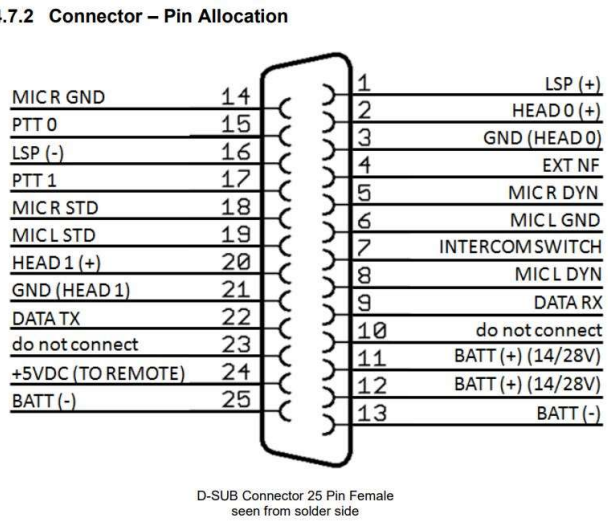
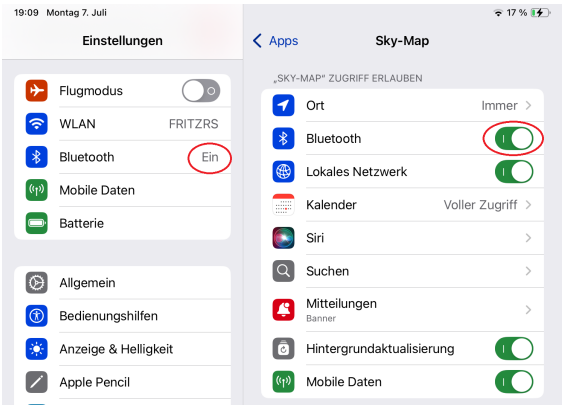


Figure 2: New Version (ATR833-II)

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 sky-map

3.1 Prerequisites and Configuration in iOS

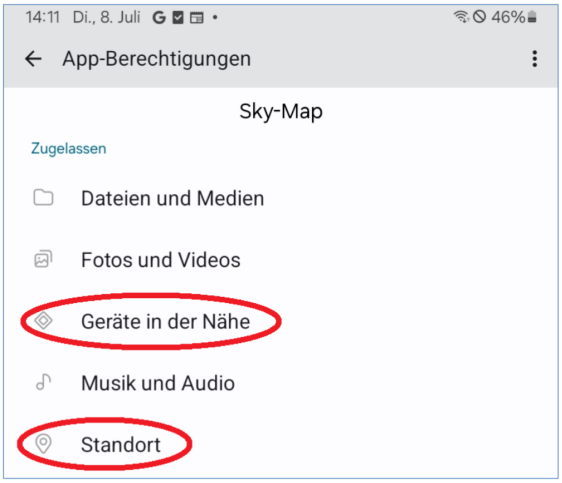


iOS Settings:

1. Bluetooth must be enabled in the iOS settings.

2. Under *Apps/sky-map*, access to Bluetooth must be granted.

3.2 Prerequisites and Configuration in Android

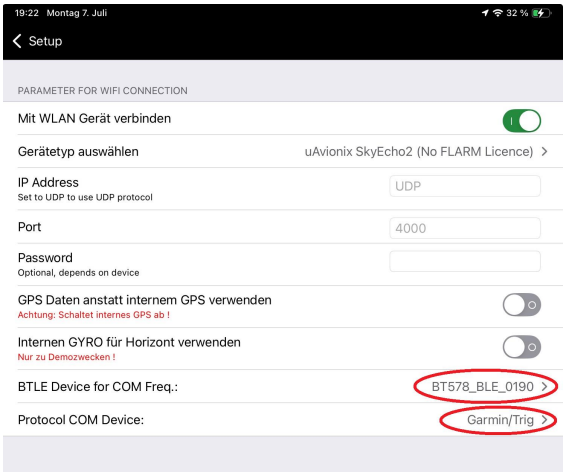


Android Settings:

1. Bluetooth must be enabled in the Android settings.

2. Under *Apps/sky-map*, access to **Nearby devices** and **Location** must be granted.

3.3 Establishing Connection with the Adapter



3. Turn on the radio with the adapter.

4. Open in sky-map:
   Menü → *Setup* → *Wireless Interface Setup*

5. Select **SD-ATR833-E** (if multiple are available).

6. Select the appropriate protocol for your radio:
   Funke ATR833

7. Exit the setup.

At the next program start, sky-map will automatically reconnect to the last selected BTLE adapter.

Important: For the automatic connection at program start to work, the radio and BTLE adapter must be turned on **before** sky-map is started.
If this is not the case, the connection must be established manually by accessing the setup (see step 4).

4 Contact

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

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