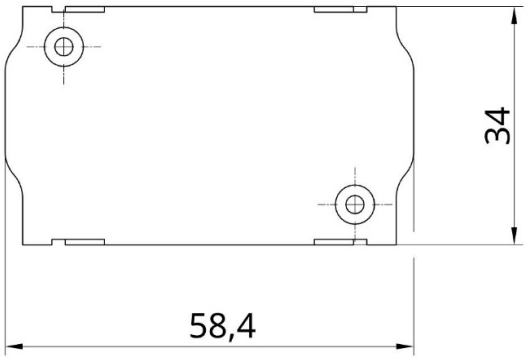
# f.u.n.k.e ATR833 - BLE Bluetooth Dual Source Adapter

## easyVFR EXPERIMENTAL


The Bluetooth Low Energy adapter (BLE) for a f.u.n.k.e ATR833 VHF transceiver (aviation radio) is compatible with the following devices: **ATR833, ATR833S, ATR833A, ATR833-II, ATR833A-II.**

The adapter was originally developed for connection to the easyVFR navigation software, but is now compatible with a variety of navigation apps that support frequency transmission. It implements the data transfer between the navigation software and the radio hardware (BLE ↔ RS-232). The adapter simply plugs in between the existing wiring and the radio and is securely held in place on the housing thanks to the Molex Spring Lock system.

No additional power supply is required. The adapter can be operated with 12 V and 24 V onboard voltage. An internal, self-resetting fuse is integrated in the housing. The power supply is protected against reverse polarity and short-circuit proof.

**The adapter also works when an EFIS is already connected to the radio.**

**No additional 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 Connector Pin Assignment

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

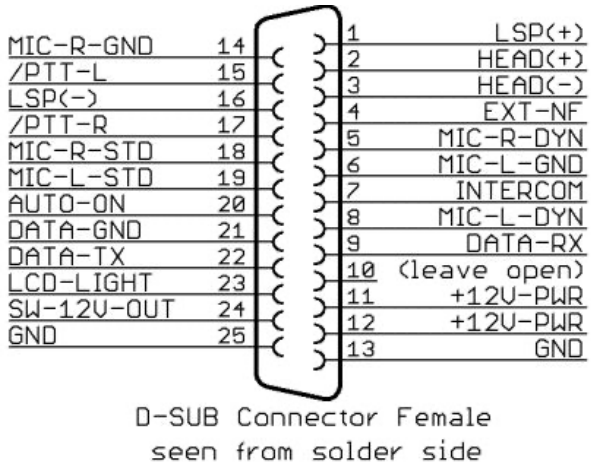



Figure 1: Old version (ATR833)

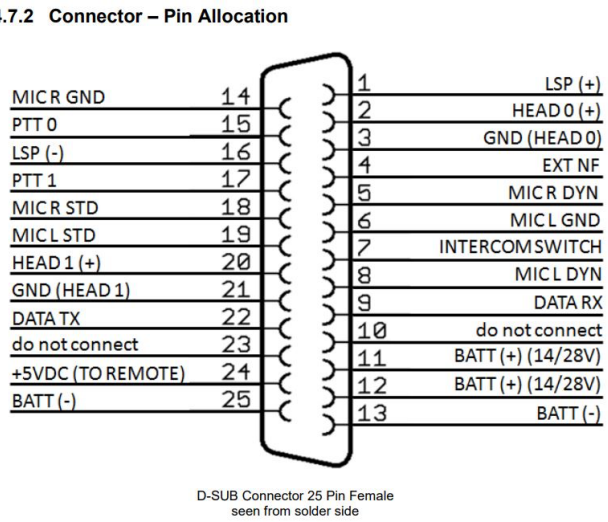



Figure 2: New version (ATR833-II)

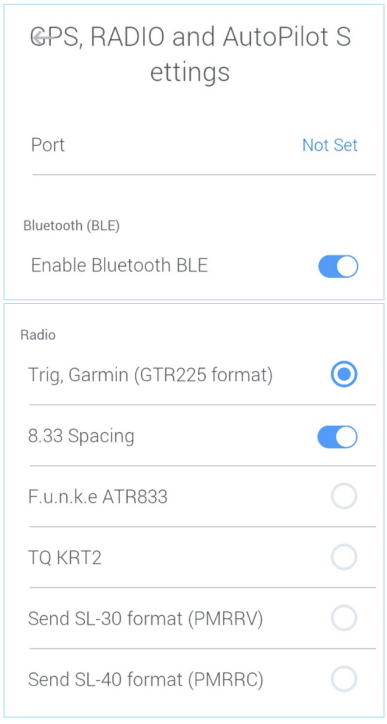
| Pin | Names | Functionality |
|---|---|---|
| 1 | LSP(+) | Output external Loudspeaker Positive |
| 2 | HEAD-0 (+) | Output Headset-Speaker Positive |
| 3 | GND (HEAD-0) | Output Headset-Speaker Negative |
| 4 | EXT-NF | Input external Audio-Signal |
| 5 | MIC R DYN | Input Microphone Right Dynamic |
| 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 |

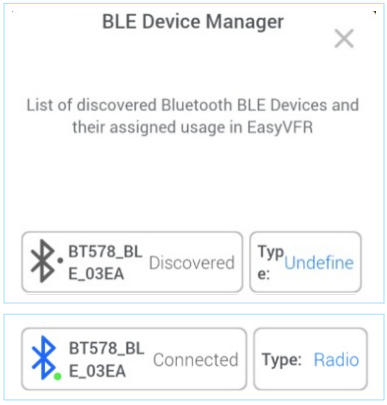
# 3 Configuration in EasyVFR

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

## 3.1 Enable Bluetooth and select radio

- Switch on aircraft power, turn on the radio.
- Enable Bluetooth on your phone / tablet.
- Start EasyVFR4.




### 3.1.1 Enable Bluetooth BLE in EasyVFR

1. Open menu
2. **System** → **GPS, Radio and AutoPilot Settings**
3. Scroll down and activate option **Enable Bluetooth BLE**

### 3.1.2 Select radio protocol

1. Continue scrolling down to the Radio section
2. Select matching radio/protocol
3. If your device is not listed: test protocols, recommended from top to bottom
   - **GTR225** is the most comprehensive (incl. 8.33 kHz),
   - **SL40/SL30** are older legacy protocols.

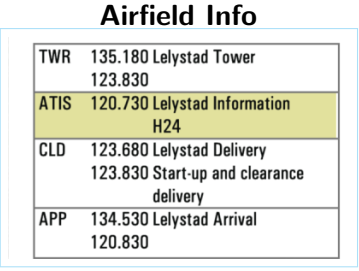
### 3.1.3 Open BLE device list and assign adapter

1. EasyVFR now continuously scans for BLE devices
2. Menu → **Bluetooth BLE devices**
3. Select the adapter from the list (e.g. **SD-ATR833**)
4. Tap the Type until **Radio** is set (cycle: AutoPilot / GPS/Traffic / Radio / undefined)
5. EasyVFR connects; indicated by "Connected" (incl. Bluetooth icon).

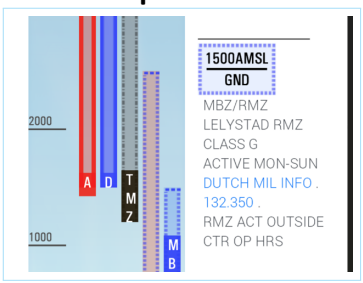
### 3.1.4 Send frequencies (Remote Tuning)

1. Tap frequency in:

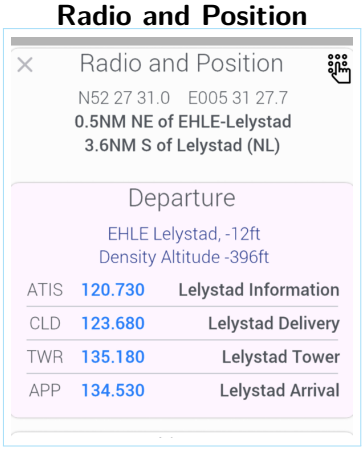
**Airfield Info**

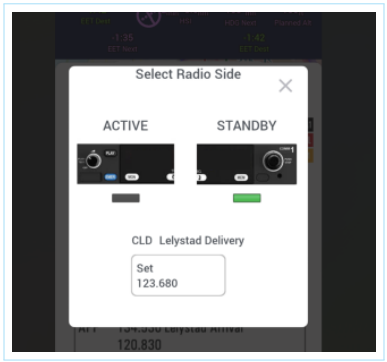



**Airspaces Info**



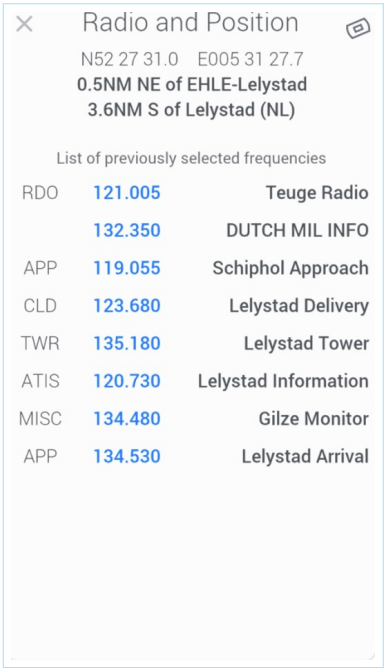

**Radio and Position**




2. Then select **Active** or **Standby** (depending on the radio, only Standby may be possible) → press **Set**.

### 3.1.5 Optional control aids (Radio Card)




1. Keypad icon: manual frequency entry
2. Clock icon: recently set frequencies (History)

# 4 Contact

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


**LayCom Vision GmbH – SD-Link**
Michael Hoffmann

Chausseestr. 46
D-15518 Rauen, Germany

E-Mail: info@sdlink.de
Phone: +49 3361 710253