

## INSTALLATION MANUAL

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

EasyVFR · **EXPERIMENTAL**

Bluetooth Low Energy adapter (BLE) that handles the data transfer between the navigation software and a f.u.n.k.e ATR833 VHF transceiver (aviation radio) (BLE + RS-232 → RS-232). The adapter simply connects to the radio – **no further electrical work required.**



## SPECIFICATIONS

|                  |                                               |
|------------------|-----------------------------------------------|
| RADIO            | f.u.n.k.e ATR833                              |
| COMPATIBILITY    | ATR833 · -A · -S · -II-LCD · -II-OLED · -A-II |
| OPERATING SYSTEM | Android · iOS                                 |
| INTERFACE        | BLE + RS-232 → RS-232                         |
| CONFIGURATION    | Dual-Source BLE/EFIS → Radio                  |
| POWER SUPPLY     | via the radio · 12/24 V · up to 28 V          |
| INTEGRATED FUSE  | yes · self-resetting                          |
| REQUIREMENT      | radio from SW 5.8                             |
| WEIGHT           | 50 g                                          |
| DIMENSIONS       | 58,4 × 47,45 × 16,5 mm                        |

**IMPORTANT**

This is a prototype for experimental use only!

# 1 Radio Configuration

## IMPORTANT

Supported are ATR833-S, ATR833-A and ATR833-II-OLED from software SW 5.8. Older versions ( $\leq 5.7$ ) are not compatible. First supported serial number: 40131610 (2010). Tip: the last two digits of the serial number = year of production.

No further configuration is required on the radio.

# 2 Connector Pin Assignment

## IMPORTANT NOTICE

### Power supply via pins 8/9

The SD-Link is powered by the radio via pins 8/9 – no separate power supply is required. If the adapter stays dark, missing supply on these pins is the most common cause. In that case, first check whether voltage is present there.

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

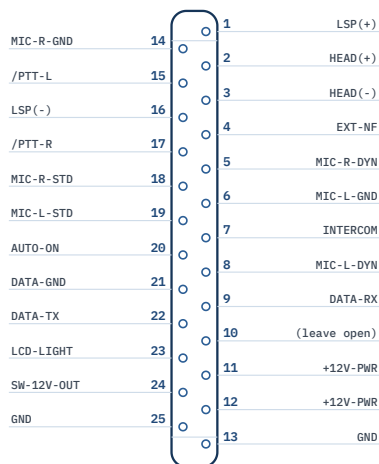


Figure 1 · Old version (ATR833)

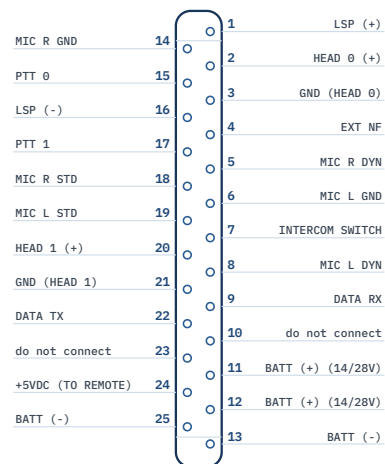


Figure 2 · New version (ATR833-II)

## D-SUB 25-Pin · Pin Allocation in Detail

D-SUB 25-pin female connector, solder side. Complete allocation according to the f.u.n.k.e manual.

| PIN | NAME            | FUNCTION                                                               |
|-----|-----------------|------------------------------------------------------------------------|
| 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                                            |

Source: f.u.n.k.e manual.

## 3 Configuration in EasyVFR

### IMPORTANT

#### **Do not pair the SD-Link in the Bluetooth settings**

The SD-Link adapter is a Bluetooth Low Energy (BLE) device. BLE devices are not paired via the Bluetooth settings of your tablet or phone like regular Bluetooth devices such as headsets or speakers.

Therefore, please do not open the Bluetooth settings of iOS, Android or Windows to search for or pair the SD-Link there.

The connection to the SD-Link is set up exclusively within the navigation app itself, e.g. in SkyDemon, Sky-Map, VFRnav, EasyVFR or another supported app. Pairing at operating-system level is not required and can even prevent the connection.

Regular Bluetooth devices such as headsets, intercoms or speakers can still be used in parallel. They are paired via the operating system as usual. The SD-Link, however, is addressed directly by the navigation app.

**If the SD-Link has already been paired in the Bluetooth settings:** Please remove the SD-Link completely from the Bluetooth device list of your tablet or phone. Do not pair it again via the operating system afterwards; instead, set it up again exclusively within the navigation app.

### REMEMBER

**Do not pair the SD-Link in the operating system.  
Always set up the SD-Link directly in the navigation app.**

### 3.1 Enable Bluetooth and select radio

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

## GPS, RADIO and AutoPilot Settings

Port Not Set

## Bluetooth (BLE)

Enable Bluetooth BLE ☒

## Radio

Trig, Garmin (GTR225 format) ☒8.33 Spacing ☒F.u.n.k.e ATR833 ☐TQ KRT2 ☐Send SL-30 format (PMRRV) ☐Send SL-40 format (PMRRC) ☐

## BLE Device Manager



List of discovered Bluetooth BLE Devices and their assigned usage in EasyVFR

|                                                                                                               |                             |
|---------------------------------------------------------------------------------------------------------------|-----------------------------|
|  BT578_BLE_03EA Discovered | Type: <span>Undefine</span> |
|  BT578_BLE_03EA Connected  | Type: <span>Radio</span>    |

## 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.

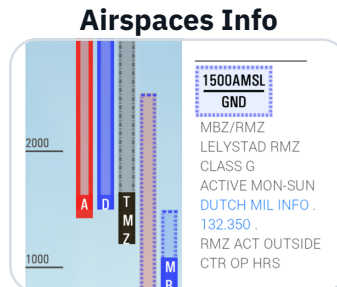
## 3.1.3 Open BLE device list and assign adapter

- 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).

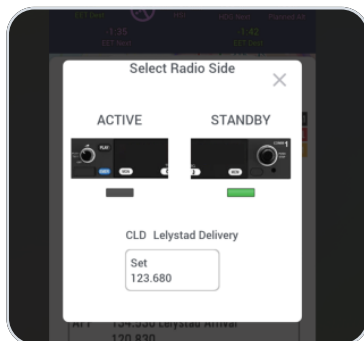
### 3.1.4 Send frequencies (Remote Tuning)

- ① Tap frequency in:

| Airfield Info |                                                                         |
|---------------|-------------------------------------------------------------------------|
| TWR           | 135.180 Lelystad Tower<br>123.830                                       |
| ATIS          | 120.730 Lelystad Information<br>H24                                     |
| CLD           | 123.680 Lelystad Delivery<br>123.830 Start-up and clearance<br>delivery |
| APP           | 134.530 Lelystad Arrival<br>120.830                                     |



| Radio and Position        |                              |
|---------------------------|------------------------------|
| Radio and Position        |                              |
| N52 27 31.0 E005 31 27.7  |                              |
| 0.5NM NE of EHLE-Lelystad |                              |
| 3.6NM S of Lelystad (NL)  |                              |
| Departure                 |                              |
| EHLE Lelystad, -12ft      |                              |
| Density Altitude -396ft   |                              |
| ATIS                      | 120.730 Lelystad Information |
| CLD                       | 123.680 Lelystad Delivery    |
| TWR                       | 135.180 Lelystad Tower       |
| APP                       | 134.530 Lelystad Arrival     |



- 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)

| Radio and Position                      |                              |
|-----------------------------------------|------------------------------|
| N52 27 31.0 E005 31 27.7                |                              |
| 0.5NM NE of EHLE-Lelystad               |                              |
| 3.6NM S of Lelystad (NL)                |                              |
| List of previously selected frequencies |                              |
| RDO                                     | 121.005 Teuge Radio          |
|                                         | 132.350 DUTCH MIL INFO       |
| APP                                     | 119.055 Schiphol Approach    |
| CLD                                     | 123.680 Lelystad Delivery    |
| TWR                                     | 135.180 Lelystad Tower       |
| ATIS                                    | 120.730 Lelystad Information |
| MISC                                    | 134.480 Gilze Monitor        |
| APP                                     | 134.530 Lelystad Arrival     |

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

## 4 Contact

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

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## Dimensions

