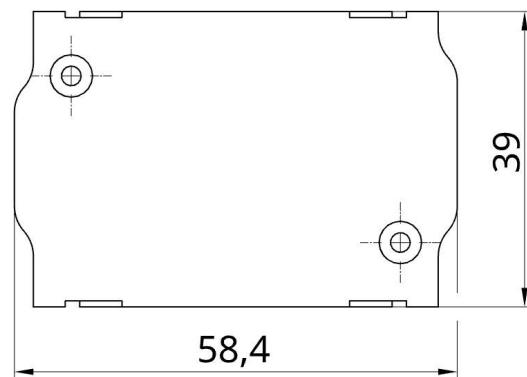




f.u.n.k.e ATR833 Adapter BLE Bluetooth

easyVFR 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 easyVFR. 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-12U-OUT	24	11	+12U-PWR
GND	25	12	+12U-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)

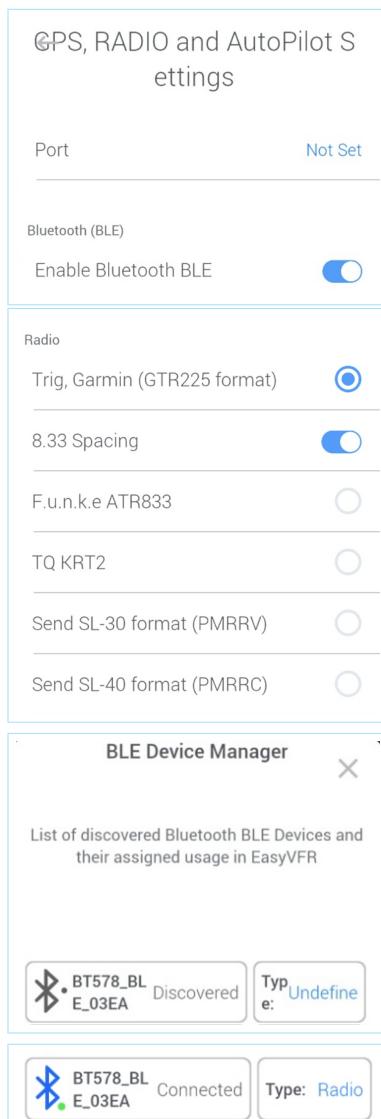
10	do not connect	Pin 10 is used by adapters for device identification
11	+14 / +28V-PWR	Input Power Supply +12V
12	+14 / +28V-PWR	Input Power Supply +12V
13	BATT (-)	Ground Side of Power Supply
14	MIC R GND	Input Microphone Right Ground
15	PTT-0	Push-to-Talk 0 (connect to ground for transmitting)
16	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 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).

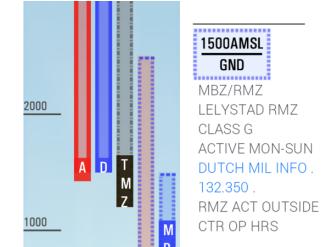
3.1.4 Send frequencies (Remote Tuning)

1. Tap frequency in:

Airfield Info

TWR	135.180 Lelystad Tower
	123.830
ATIS	120.730 Lelystad Information
	H24
CLD	123.680 Lelystad Delivery
	123.830 Start-up and clearance
	delivery
APP	134.530 Lelystad Arrival
	120.830

Airspaces Info



1500AMSL
GND
MBZ/RMZ
LELYSTAD RMZ
CLASS G
ACTIVE MON-SUN
DUTCH MIL INFO.
132.350
RMZ ACT OUTSIDE
CTR OP HRS

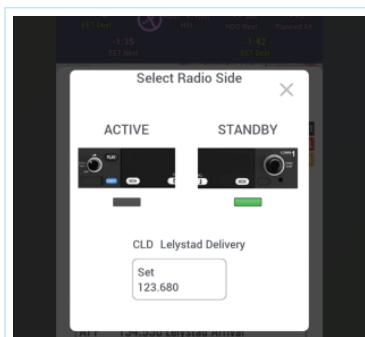
Radio and Position

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, suggestions, or positive feedback,
please contact:

LayCom Vision GmbH – SD-Link

Michael Hoffmann

Chausseestr. 46
D-15518 Rauen, Germany

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

