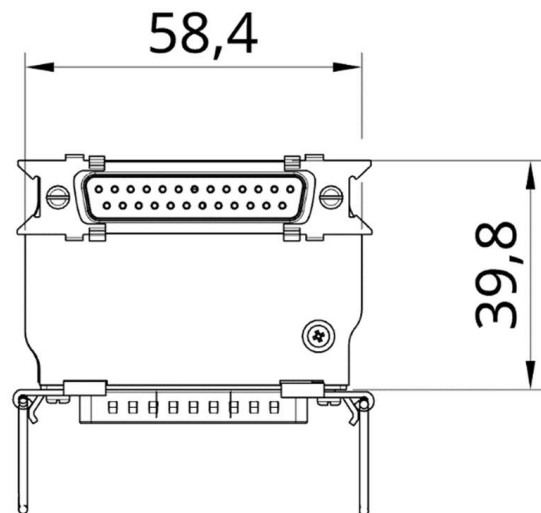


f.u.n.k.e ATR833 – angled Adapter BLE Bluetooth

SkyDemon (SD) EXPERIMENTAL



Angled version of the Bluetooth Low Energy adapter (BLE) for a f.u.n.k.e ATR833 VHF transceiver (aviation radio), for installations with limited space behind the radio, compatible with ATR833, ATR833S, ATR833A, ATR833-II, ATR833A-II.

The adapter was developed as an interface between an ATR833 and the navigation software SkyDemon (SD). It implements the data transfer between the navigation software (SD) and the radio hardware (BLE ↔ RS-232). The adapter simply plugs between the existing wiring and the radio and holds to the housing thanks to the Molex Spring Lock system.

No additional power supply is necessary. The adapter can be operated with 12V and 24V aircraft voltage. An internal mini-fuse (125 mA) is integrated in the housing. The power supply is protected against reverse polarity and short circuits.

No further electrical or mechanical 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:

4.7.2 Connector – Pin Allocation

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)

MICR GND	14	1	LSP (+)
PTT 0	15	2	HEAD 0 (+)
LSP (-)	16	3	GND (HEAD 0)
PTT 1	17	4	EXT NF
MICR STD	18	5	MICR DYN
MICL STD	19	6	MICL GND
HEAD 1 (+)	20	7	INTERCOMSWITCH
GND (HEAD 1)	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)

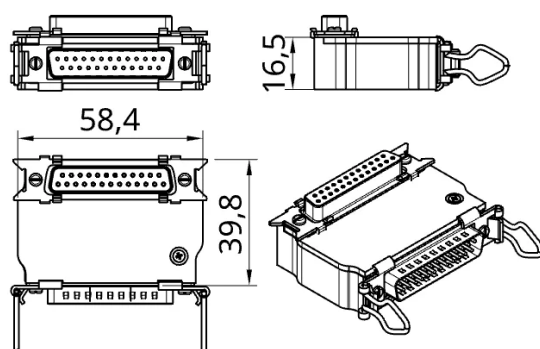
Pin	Names	Functionality
1	LSP(+)	Output external Loudspeaker Positive
2	HEAD-0 (+)	Output Headset-Speaker Positive
3	GND (HEAD-0)	Output Headset-Speaker Negative
4	EXT-NF	Input external Audio-Signal
5	MIC R DYN	Input Microphone Right Dynamic
6	MIC L GND	Input Microphone Left Ground
7	INTERCOM SWITCH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

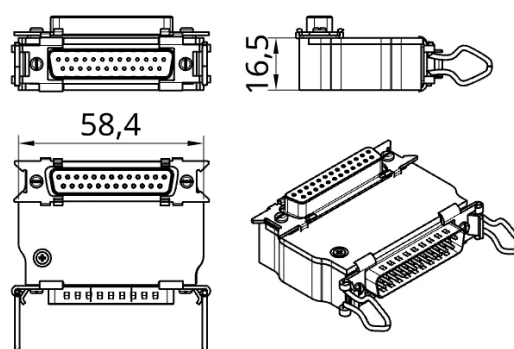
3 Product Variants

The orientation of the connector varies depending on the radio model. Therefore, pay attention to the direction in which the adapter should be angled. For this reason, we offer the product variants **LEFT** and **RIGHT**.


SD-ATR833-A-LEFT




SD-ATR833-A-RIGHT



Here is an overview table for orientation:

 DE	Funkgerät	Gewünschte Ausrichtung	Benötigter Adapter
	ATR833-II-LCD/OLED	Zeigt nach unten	SD-ATR833-A-LEFT
	ATR833-II-LCD/OLED	Zeigt nach oben	Montage blockiert – Antennenbuchse
	ATR833A	Zeigt nach unten	SD-ATR833-A-RIGHT
	ATR833A	Zeigt nach oben	SD-ATR833-A-LEFT
	ATR833A-II-LCD/OLED	Zeigt nach unten	SD-ATR833-A-RIGHT
	ATR833A-II-LCD/OLED	Zeigt nach oben	SD-ATR833-A-LEFT
	ATR833S	Zeigt nach unten	SD-ATR833-A-LEFT
	ATR833S	Zeigt nach oben	Montage blockiert – Antennenbuchse

Hinweis: Wenn Sie unsicher sind, welchen Adapter Sie benötigen, senden Sie uns gerne ein Bild der Rückseite des Funkgeräts oder die Modellnummer an info@sdlink.de.

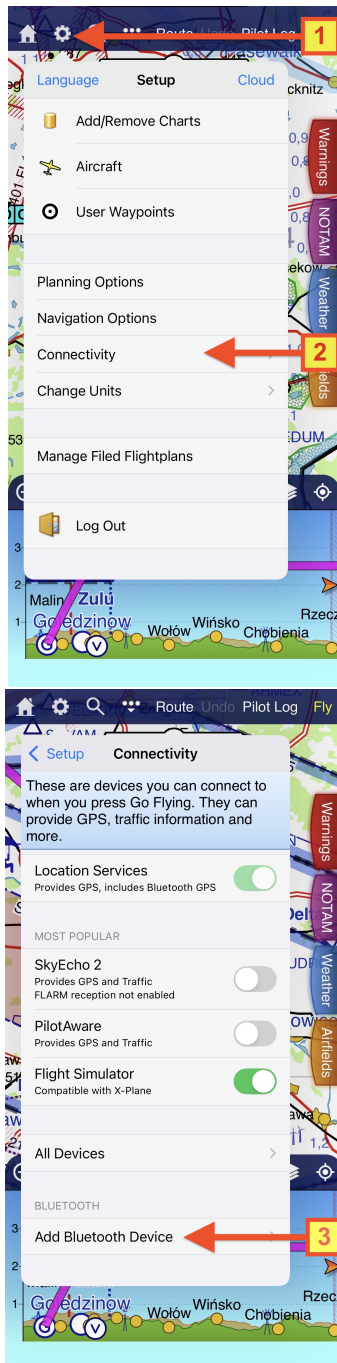
 EN	Radio	Desired Orientation	Required Adapter
	ATR833-II-LCD/OLED	Points downward	SD-ATR833-A-LEFT
	ATR833-II-LCD/OLED	Points upward	Mounting blocked – Antenna socket
	ATR833A	Points downward	SD-ATR833-A-RIGHT
	ATR833A	Points upward	SD-ATR833-A-LEFT
	ATR833A-II-LCD/OLED	Points downward	SD-ATR833-A-RIGHT
	ATR833A-II-LCD/OLED	Points upward	SD-ATR833-A-LEFT
	ATR833S	Points downward	SD-ATR833-A-LEFT
	ATR833S	Points upward	Mounting blocked – Antenna socket

Note: If you are unsure which adapter you need, please send us a picture of the back of your radio or provide the model number at info@sdlink.de.

Note: If you have questions about variant selection, we are happy to help via email at info@sdlink.de.

4 Configuration in SkyDemon

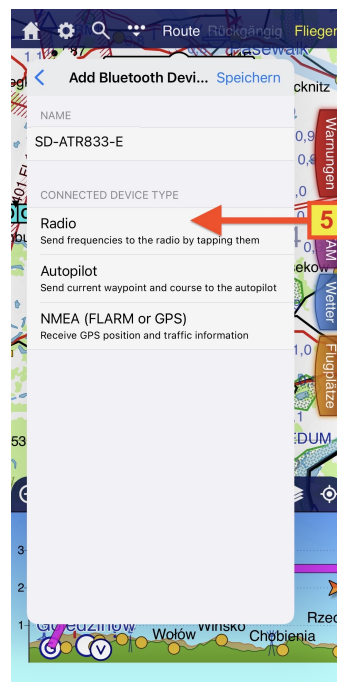
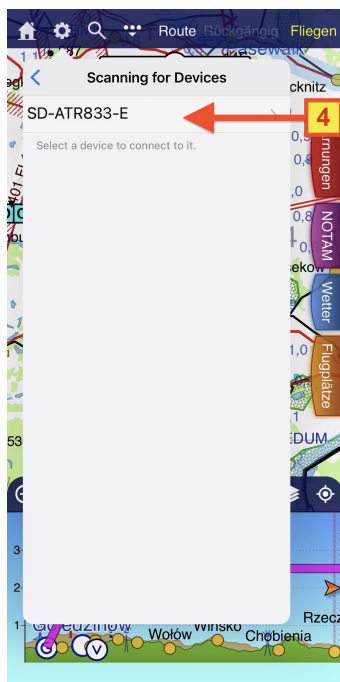
Important: The adapter is not connected via regular Bluetooth settings. BLE devices are usually not displayed there.



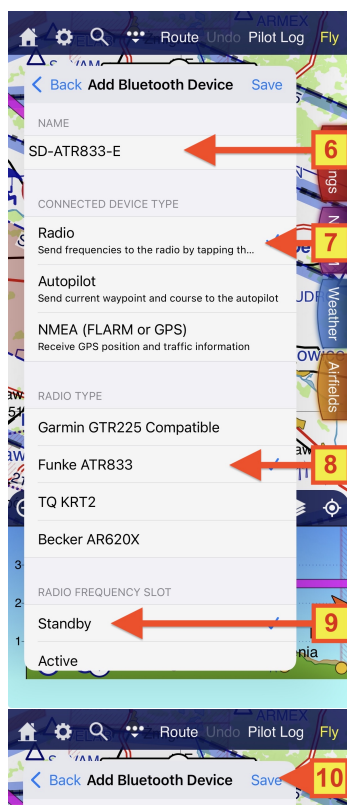
1. Open the configuration menu via the gear symbol.

2. Select *Connectivity* in the configuration.

3. In *Connectivity* -> select *Add Bluetooth Device*.



4. Wait until the search for BLE devices is complete (this may take a moment). Then select the entry **SD-ATR833-A**
5. Select the device type **Radio**.



6. The adapter name can be customized as desired.
7. The device type **Radio** must be selected.
8. Select the radio type **Funke ATR833**.
9. Select whether the standby or active frequency should be set.
10. **Save the settings with Save** - the adapter is now ready for use.

5 Contact

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

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