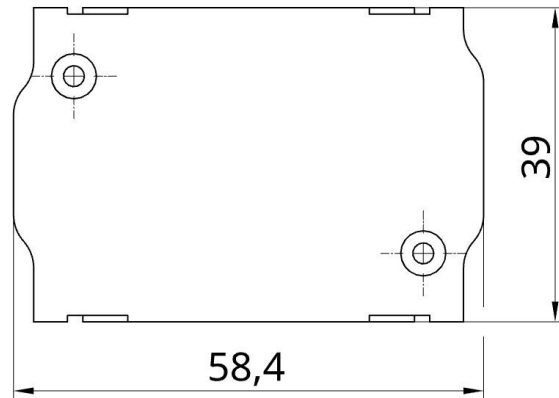# f.u.n.k.e ATR833 - Adapter BLE Bluetooth

SkyDemon (SD) EXPERIMENTAL

Bluetooth Low Energy Adapter (BLE) for f.u.n.k.e ATR833 VHF Transceiver (Aviation Radio)
The adapter is compatible with the following models: ATR833, ATR833S, ATR833A, ATR833-II, ATR833A-II. It was developed as an interface between an ATR833 and the SkyDemon (SD) navigation software. It facilitates data transfer between the navigation software (SD) and the radio hardware via BLE <-> RS-232. The adapter is simply plugged between the existing wiring and the radio and securely fastens to the housing using the Molex Spring Lock system.

An additional power supply is not required. The adapter operates on 12 V and 24 V board voltage. An internal mini-fuse (125 mA) is integrated into the housing. The power supply is protected against reverse polarity and short circuits.

No further electrical or mechanical work required!

☐ Please note: This is a prototype for experimental use only!
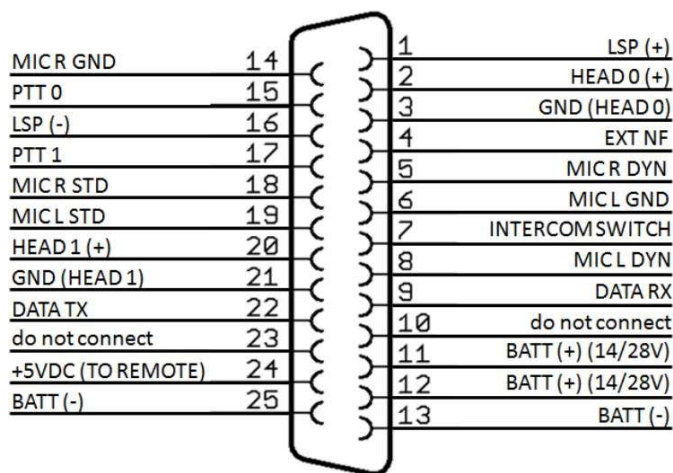
1. Radio Configuration

No additional configuration on the radio is required.

2. Connector Pinout

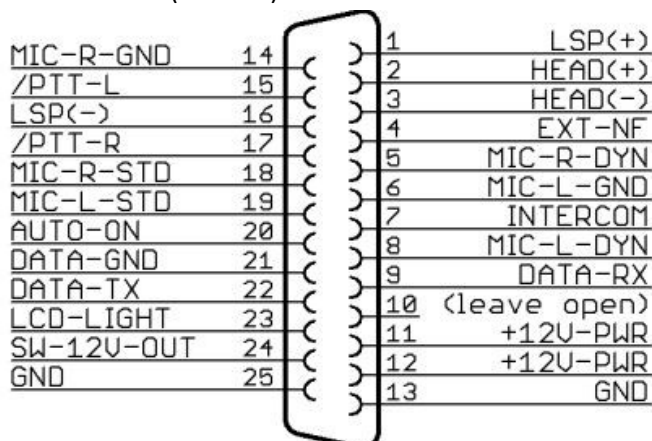This is an excerpt from the f.u.n.k.e installation manual:

New Version (ATR833-II)

4.7.2 Connector – Pin Allocation

MIC R GND	14		1	LSP (+)
PTT 0	15		2	HEAD 0 (+)
LSP (-)	16		3	GND (HEAD 0)
PTT 1	17		4	EXT NF
MIC R STD	18		5	MIC R DYN
MIC L STD	19		6	MIC L GND
HEAD 1 (+)	20		7	INTERCOM SWITCH
GND (HEAD 1)	21		8	MIC L 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

Old Version (ATR833)

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

Pin 9 of the outgoing connector provides V24 data for connecting additional devices (Multi-Drop). This PnP solution allows further hardware control by tapping the signal at Pin 9 and routing it to an autopilot, AV-30, or other compatible devices.

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)

Pin	Names	Functionality
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. Contact Information

For issues, questions, feedback, or positive experiences, please contact:

LayCom Vision GmbH - SD-Link
Michael Hoffmann
Chausseestr. 46
D-15518 Rauen

Germany

Email: info@sdlink.de
Phone: +49 3361 710253