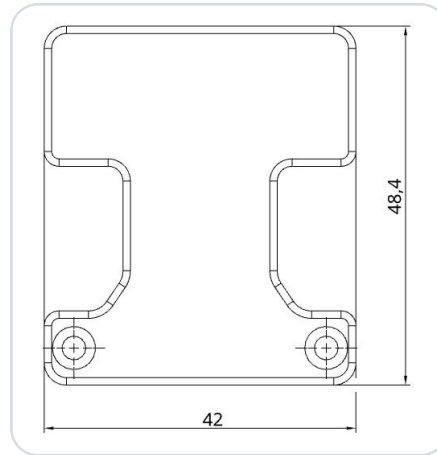


uAvionix AV-30 BLE Bluetooth Adapter

sky-map EXPERIMENTAL



Bluetooth Low Energy (BLE) adapter for a uAvionix AV-30 Multi-Function Display (MFD). The adapter was developed as a BLE interface for an AV-30 to the navigation software sky-map. It realizes the data transfer between the navigation software (SD) and the GPS input of the AV-30 on Port 1 (Serial 1). The adapter is simply plugged between the existing wiring and the AV-30 and is held securely to the housing thanks to two knurled screws.

No additional power supply is necessary. The adapter can be operated with 12 V and 24 V on-board voltage. An existing AV-Link module remains functional.

No further electrical or mechanical work necessary!

IMPORTANT

This is a prototype for exclusively experimental use!

1 AV-30 Configuration

The following settings must be made on the AV-30 to display navigation data via the SD-AV-30-E adapter. Here is an excerpt from the uAvionix installation manual:

1.1 Opening the installation menu

The installation menu is used to configure the AV-30 after installation. It should only be accessed on the ground and changed by the installer.

To enable access:

- 1 First turn the unit off completely.
- 2 Press and hold the main control knob while power is applied.



Figure 1 · Installation menu access

- 3 Keep the knob pressed until the startup logo appears. The installation menu is now enabled but does not appear on the screen automatically.
- 4 Make sure the unit is in **AI** or **DG** mode. Select the mode by pressing and holding the centre button until the mode display changes.
- 5 In **AI** or **DG** mode, briefly press the left **MENU** button three times until **INSTALL / ROT TO SEL** appears. Figure 2 shows the sequence of the displayed fields.



Figure 2 · Field sequence in the installation menu

1.2 Adjusting parameters

- ① Turn the knob left and right to reach the various adjustable parameters.
- ② Press the knob on the desired field to adjust the associated setting.
- ③ After adjusting, press the knob again to exit edit mode; the installation menu stays active.

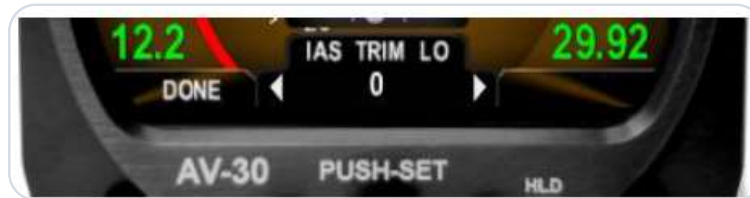


Figure 3 · Exiting edit mode

- ④ Press **DONE**, or wait 30 seconds without input, to exit the installation menu and return to the main screen.



Figure 4 · Completing the setting and exiting the menu

IMPORTANT

Now work your way to the menu item **Serial1** and select **NMEA 9600**.

2 Connector Pin Assignment

This is an excerpt from the AV-30 installation manual:

PIN	FUNCTION	TYPE	COMMENT
1	Power	Power	+12 to +28 VDC
2	GPS Navigator	Input	GPS RS-232
3	Spare Serial	Output	Reserved – Do Not Connect
4	Serial 2	Input	Transponder RS-232
5	Serial 2	Output	Transponder RS-232
6	Serial 4	Input	AV-Mag Data
7	OAT Supply	Output	White Probe Wire
8	MFG Serial	Input	Reserved – Field Update
9	Ground	Power	Aircraft Ground
10	Aux Power Ret	Power	AV-Mag / Auxiliary Power return
11	Audio H	Output	Audio Alerts Hi
12	Audio L	Output	Audio Panel Lo
13	Aux Power Out	Power	AV-Mag / Auxiliary Power
14	OAT Return	Input	White / Blue Probe Wire
15	MFG Serial	Output	Reserved – Field Update

Source: uAvionix AV-30 manual.

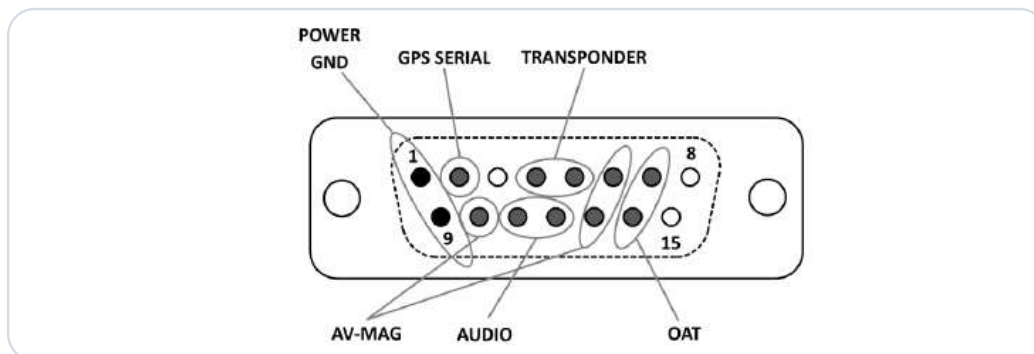


Figure 5 · AV-30 Connector Pin Assignment

3 Configuration in sky-map

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.

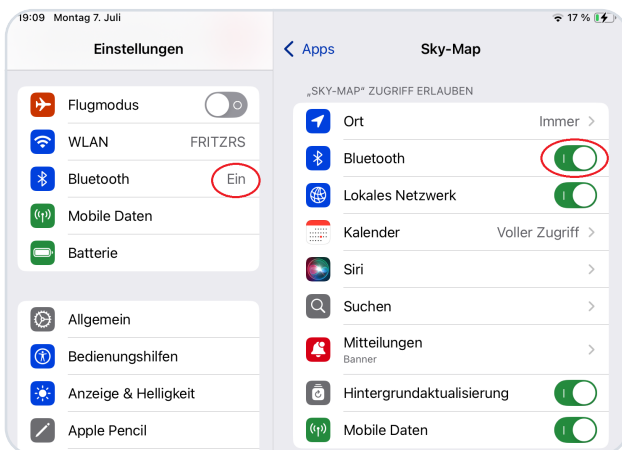
Regular Bluetooth devices such as headsets, intercoms or speakers can still be used in parallel. They are paired via the operating system as usual. The SD-Link, however, is addressed directly by the navigation app.

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.**

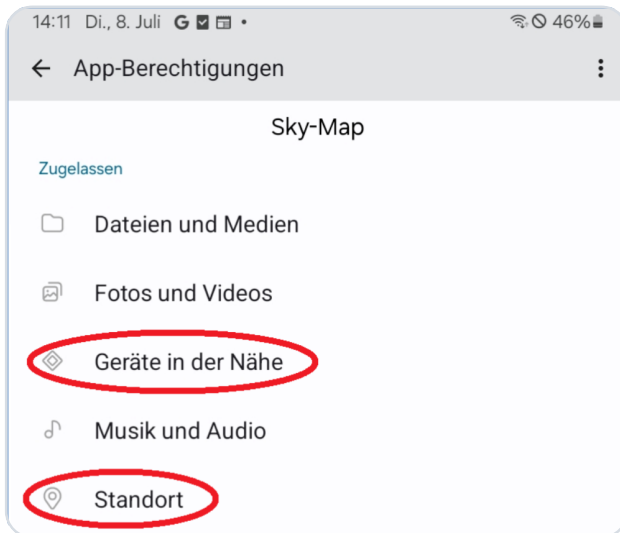
3.1 Prerequisites and Configuration in iOS



iOS Settings:

- 1 Bluetooth must be enabled in the iOS settings.
- 2 Under **Apps / sky-map**, access to Bluetooth must be granted.

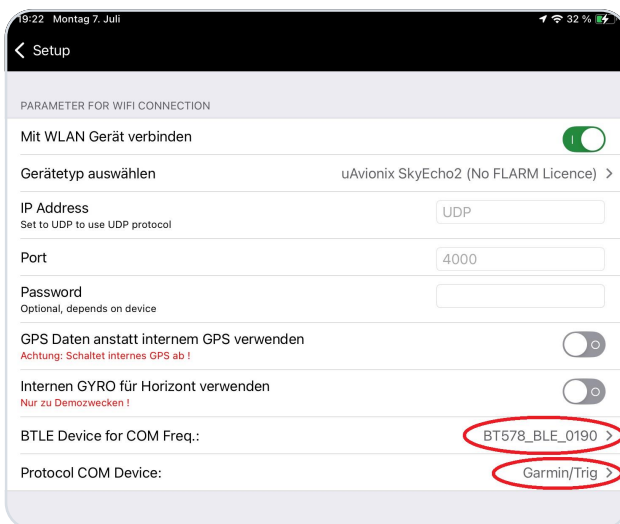
3.2 Prerequisites and Configuration in Android



Android Settings:

- ③ Bluetooth must be enabled in the Android settings.
- ④ Under **Apps/sky-map**, access to **Nearby devices** and **Location** must be granted.

3.3 Establishing Connection with the Adapter



- ⑤ Turn on the radio with the adapter.
- ⑥ Open in sky-map:
Menü → Setup → **Wireless Interface Setup**
- ⑦ Select **SD-AV-30-E** (if multiple are available).
- ⑧ Select the appropriate protocol for your radio:
uAvionix AV-30
- ⑨ Exit the setup.

At the next program start, sky-map will automatically reconnect to the last selected BTLE adapter.

IMPORTANT

For the automatic connection at program start to work, the radio and BTLE adapter must be turned on **before** sky-map is started.

If this is not the case, the connection must be established manually by accessing the setup (see step 4).

4 Contact

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

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