

INSTALLATION MANUAL

TQ KRT2 – angled Adapter BLE Bluetooth

XCSoar (Android) · **EXPERIMENTAL**

Bluetooth Low Energy adapter (BLE) that handles the data transfer between the navigation software and a TQ KRT2 VHF transceiver (aviation radio) (BLE ↔ RS-232). The adapter simply connects to the radio – **no further electrical work required**.



SPECIFICATIONS

RADIO	TQ KRT2
COMPATIBILITY	KRT2-S · KRT2-F · KRT2-P
OPERATING SYSTEM	Android · iOS
INTERFACE	BLE ↔ RS-232
POWER SUPPLY	via the radio · 12/24 V
INTEGRATED FUSE	yes · not self-resetting
WEIGHT	50 g
DIMENSIONS	46,44 × 23,94 × 16,5 mm

IMPORTANT

This is a prototype for experimental use only!

1 Radio Configuration

IMPORTANT NOTICE

Baud rate: 9600, not 115200

The TQ documentation states a baud rate of 115200 – correct for operation with the SD-Link is 9600 baud, 8N1.

No additional configuration is required on the radio unit.

2 Connector Pin Assignment

This is an excerpt from the TQ installation manual:

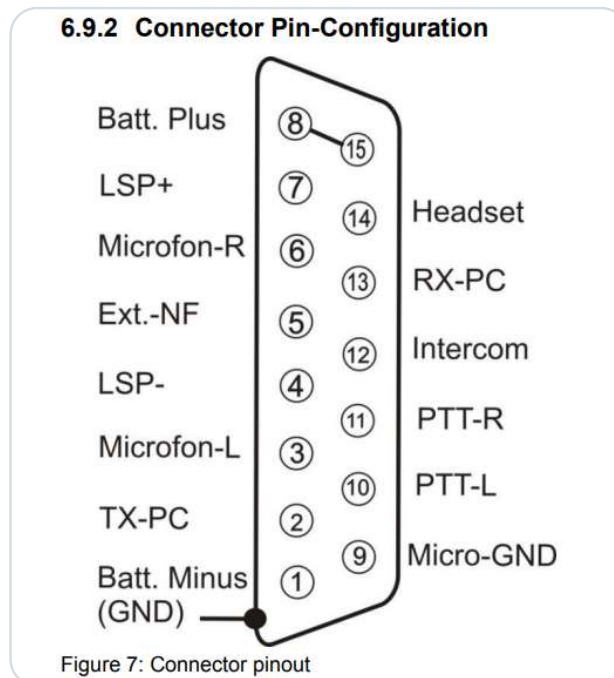


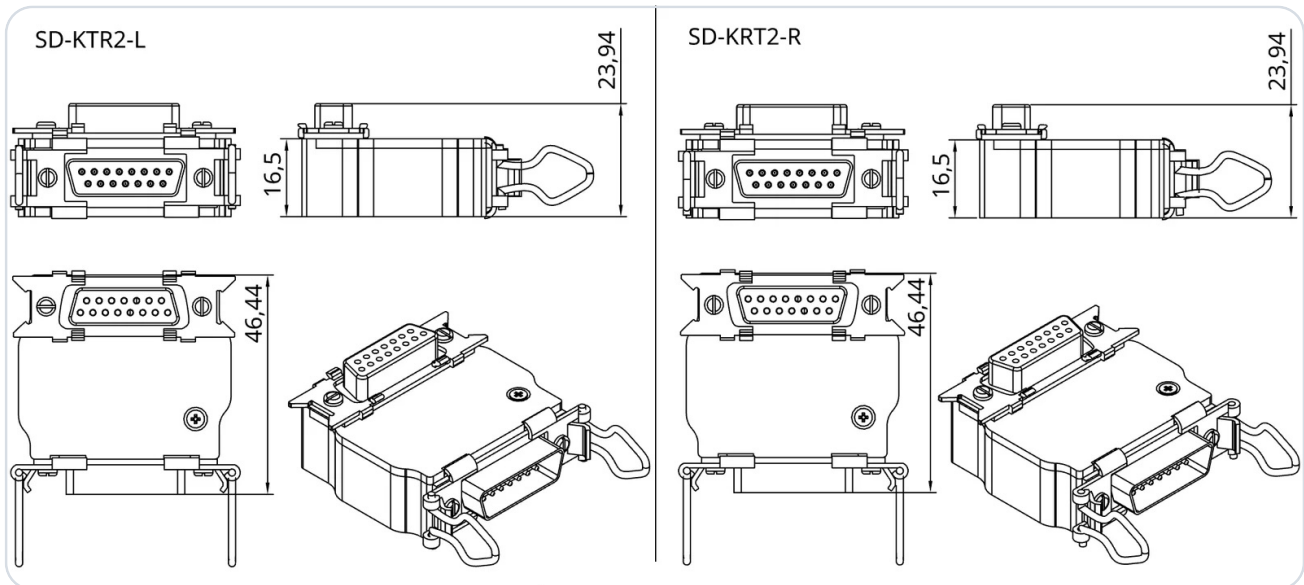
Figure 1 · KRT2 Connector Pinout

3 Product Variants

The mechanical orientation of the connector differs between the KRT2-S and KRT2-F. This changes the direction in which the adapter is angled. Therefore, please pay attention to the respective radio unit when selecting the product variant (LEFT/RIGHT).



For this reason, there are the product variants **SD-KRT2-A-LEFT** and **SD-KRT2-A-RIGHT**.



3.1 Orientation of LEFT/RIGHT per Radio Unit

Device	Desired Orientation	Required Adapter
KRT2-F	Points upward	SD-KRT2-A-LEFT
KRT2-F	Points downward	SD-KRT2-A-RIGHT
KRT2-S	Points downward	SD-KRT2-A-LEFT
KRT2-S	Points upward	SD-KRT2-A-RIGHT

4 Configuration in XCSoar

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.**

IMPORTANT

XCSoar: experimental and Android only

This guide describes the tested setup with XCSoar on **Android** (tested from XCSoar 7.42 onwards). XCSoar support is experimental and depends on the XCSoar version, the Android device and the radio driver.

On **iOS**, up to and including version 7.44, XCSoar offers – according to our testing – no BLE port for external devices; only internal sensors and TCP/UDP are available as port types, so the SD-KRT2-A cannot be used directly on iOS. For iOS, please use one of the other supported apps (e.g. SkyDemon).

4.1 Requirements

- Onboard power on, radio switched on.
- Switch on Bluetooth on your Android device.
- Start XCSoar.

NOTE

No pairing is required. The SD-KRT2-A is a BLE device and is selected exclusively within XCSoar – not in the Bluetooth settings of Android (see the note above).

4.2 Adding the device in XCSoar

- ① Double-tap the map view to open the menu and select **Config** → **Devices**.
- ② Choose a free slot (e.g. **B**) and tap **Edit**.

- Open **Port**, select the entry **SD-KRT2** with the type **BLE port** and confirm with **Select**.

IMPORTANT NOTICE

Make sure to pick the type **BLE port**. Entries with a bare MAC address or the type **BLE sensor** are not correct; classic **Bluetooth** devices (e.g. headsets) are not correct either. No pairing is required.

- As **Driver**, select the radio type **KRT2**.
- Leave the edit dialog (back). The device setting is applied and appears in the **Devices** overview, which you close with **Close**.

NOTE

The slot now shows **KRT2 on BLE port: SD-KRT2**. As long as the radio is not connected, **No data** is shown below it; after a successful connection the display changes to **Connected**. If necessary, trigger the connection via **Reconnect**.

Port	
Headset	Bluetooth
Speaker	Bluetooth
4C:83:99:A9:47:FB	BLE sensor
SD-KRT2	BLE port
F1:B9:19:E2:9A:62	BLE sensor
5D:AB:17:33:4D:82	BLE sensor
SelectCancel	

Devices

A: Built-in GPS & sensors

Connected

B: KRT2 on BLE port: SD-KRT2

Connected

C: Disabled

Disabled

D: Disabled

Disabled

Close

Edit

Reconnect

Schematic representation of the XCSoar interface (Android), not an original screenshot: port selection (left), **Devices** overview with connected adapter (right).

4.3 Sending a frequency to the radio

- On the map, tap an airfield or waypoint that has a radio frequency stored. The list **Map elements at this location** opens.
- Select the desired entry and tap **Details**.

- ③ Use the arrows ◀ ▶ at the bottom to go to the page with **Set Active Frequency** and **Set Standby Frequency** and tap the desired option.

NOTE

Set Active Frequency transmits the frequency to the radio's active frequency, **Set Standby Frequency** to the standby frequency.

Map elements at this location

NORDHEIM (EDXN)
843 ft · 122.305 MHz

WESTAU (EDXW)
1502 ft · 119.625 MHz

SUEDFELD (EDXS)
1188 ft · 118.075 MHz

OSTBERG (EDXO)
2014 ft · 120.350 MHz

Details

Goto

Close

Waypoint: WESTAU

Pan to Waypoint

→ **Set Active Frequency**

→ **Set Standby Frequency**

Edit

◀

▶

Close

Schematic representation of the XCSOar interface (Android), not an original screenshot: **Map elements** with airfield frequency (left), waypoint menu with **Set Active/Standby Frequency** (right).

5 Contact

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

LayCom Vision GmbH – SD-Link

Michael Hoffmann

Chausseestr. 46
D-15518 Rauen, Germany

E-Mail info@sdlink.de

Phone **+49 3361 710253**

Web www.sdlink.de

