Unify Pro Pigtail

TBS (Team BlackSheep) – RP-SMA pigtail for a video transmitter

User manual



Read this manual before installation. Never power on the video transmitter without an antenna connected.

www.rotorama.com

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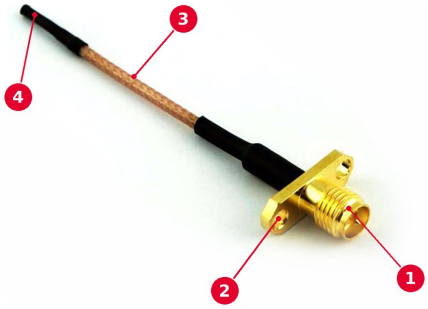
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1. Product description

1.1 What it is for

TBS Unify Pro Pigtail is a replacement antenna lead (pigtail) with an **RP-SMA** connector made by Team BlackSheep (TBS). The manufacturer designates it as a spare RP-SMA pigtail for the **TBS Unify Pro 5G8** video transmitter. It connects the antenna to the video transmitter (VTX) – for example when the original lead has been damaged in a crash or when you need to relocate the antenna connector to the frame.

One end carries an RP-SMA female connector with a mounting flange; the other end is open and is soldered directly to the video transmitter. The pigtail **has no U.FL connector** – it is intended for soldering only.



TBS Unify Pro Pigtail – parts of the product

① **RP-SMA female connector** – external thread, centre pin inside. An antenna with an RP-SMA male connector screws onto it.

② **Mounting flange** with two holes for fixing the connector to the frame.

③ **Coaxial cable** – centre conductor and shielding braid.

④ **Open end** – soldered to the antenna output of the video transmitter.

1.2 Technical data and package contents

Product designation	TBS Unify Pro 5G8 RP-SMA Pigtail
Manufacturer	Team BlackSheep (TBS)
Intended for	TBS Unify Pro 5G8 video transmitter
Connectors	open end (for soldering) – RP-SMA female
Length	55 mm
Weight	2.79 g
Package contents	1× pigtail
Not included	antenna, video transmitter, mounting screws

Technical data as specified by the manufacturer.

2. Installation and use

2.1 Before you start

- Installation requires experience with soldering small electronics. If you are not sure, have it done by an experienced modeller or a service centre.
- Before soldering, **disconnect the battery** and all power to the video transmitter.
- The soldering iron tip is hot – work on a non-flammable surface in a well-ventilated area and protect your eyes.
- Do not overheat the coaxial cable. Prolonged heating melts the insulation between the centre conductor and the braid and causes a short circuit.
- The exact location of the antenna solder pads is given in the documentation of your video transmitter.

※ Never power on the video transmitter without an antenna connected. The transmitter may be damaged.

2.2 Soldering to the video transmitter

① If you are replacing a damaged lead, first desolder the old pigtail and clean the pads on the transmitter of any remaining solder.

② At the open end ④, remove the outer insulation to expose the braid and the centre conductor. Keep the exposed section as short as possible.

③ Tin the centre conductor and the braid. Make sure no strand of the braid touches the centre conductor.

④ Solder the **centre conductor** to the antenna (RF) pad of the video transmitter.

⑤ Solder the **braid** to the ground (GND) pad next to the antenna pad.

⑥ Inspect the joints, ideally under a magnifier: they must be shiny and smooth, with no solder bridge between them.

2.3 Mounting and connecting the antenna

- Fix the connector to the frame by the mounting flange ② using suitable screws (not included). This keeps the cable from straining the solder joints.
- Route the cable without sharp bends and away from the propellers and sharp edges of the frame.
- Screw an antenna with an **RP-SMA male** connector onto connector ①. Tighten by hand, gently – and hold the connector at the same time so that the cable does not twist.
- An antenna with an SMA connector does not fit RP-SMA – the thread will screw on, but the centre contacts do not connect. Use an RP-SMA antenna or a suitable adapter.



Telling SMA and RP-SMA connectors apart. This pigtail has an RP-SMA female connector. Source: Team BlackSheep.

2.4 Check after installation

- Before switching on for the first time, check that the antenna is screwed on.
- Switch the video transmitter to the lowest power and check the image in the goggles at a short distance.
- If the image is noisy even at a short distance, switch off the transmitter and check the joints and the antenna (chapter 3.2).

3. Maintenance and troubleshooting

3.1 Maintenance

- After a crash, check that the connector is firmly fixed in the frame and that the cable is not pinched or cut.
- Tighten a loose antenna by hand. A loose antenna degrades the image.
- Keep the connector thread clean and protect it from sand and moisture.

3.2 Troubleshooting

Problem	Possible cause and solution
The antenna cannot be connected or has no contact	The antenna has an SMA connector instead of RP-SMA – the centre contacts do not connect. Use an RP-SMA male antenna or an adapter.
Noisy image even at a short distance	Cold joint, short circuit between the braid and the centre conductor, or a loose antenna. Resolder the joints and tighten the antenna.
Image drops out when the cable moves	Damaged cable or cracked solder joint. Replace or resolder the pigtail and fix the connector to the frame.
The transmitter does not transmit after power-on	The transmitter may have been powered without an antenna or with a short circuit at the output. Check the joints and the transmitter according to its manual.

4. Information for the EU and Czech Market

4.1 Importer and responsible person in the EU

The product is placed on the European Union market by the importer stated below, who is at the same time the responsible person within the meaning of Article 16 of Regulation (EU) 2023/988 of the European Parliament and of the Council on general product safety (GPSR).

Importer / responsible person in the EU	Rotorama, s.r.o.
Company ID (IČO)	051 57 692
VAT ID (DIČ)	CZ05157692
Registered office	Okrajová 1351, 674 01 Třebíč, Czech Republic
E-mail	info@rotorama.cz
Phone	+420 252 252 098
Website	www.rotorama.com

4.2 Disposal



- The crossed-out wheeled bin symbol on the product, its packaging or in the documentation means that at the end of its service life the product **must not be disposed of together with mixed municipal waste**.
- Hand it over at a take-back point for electrical equipment – at a collection yard, at a take-back point of a collective system, or at the retailer when purchasing a new equivalent product. Take-back is free of charge for the end user.
- The obligations under Act No. 542/2020 Coll., on end-of-life products, are fulfilled by the importer through a collective take-back system.
- Proper disposal helps prevent negative impacts on the environment and human health and contributes to the reuse of secondary raw materials.

Through its contractual partner **ASEKOL a.s.**, the company ensures the take-back of waste electrical equipment from households and the separate collection of waste electrical equipment, batteries and accumulators in accordance with the applicable legislation. The customer is entitled to hand over old electrical equipment or a battery or accumulator at any collection point of the above contractual partner. The addresses of these take-back points are listed at www.asekol.cz, www.ecobat.cz and also https://visoh2.mzp.cz/RegistrMistZO/RegistrMistZOPublic/MapaMistZpetOdberu.

5. Warranty and rights arising from defective performance

The rights and obligations of the contracting parties are governed by Czech law, in particular by Act No. 89/2012 Coll., the Civil Code, and Act No. 634/1992 Coll., on consumer protection.

- The seller is liable to the buyer for the product being free of defects on receipt. If the buyer is a consumer, a defect may be notified **within two years of receipt** of the product (Section 2165 of the Civil Code).
- If a defect appears within **one year** of receipt, the product is deemed to have been defective already at the time of receipt (Section 2161(5) of the Civil Code).
- When purchasing online, a consumer has the right to **withdraw from the contract within 14 days** of receiving the goods without giving a reason (Section 1829 of the Civil Code).
- Claims should be made with the retailer from whom you purchased the product. The importer's contact details are given in Chapter 4.1.
- The competent body for out-of-court settlement of consumer disputes is the **Czech Trade Inspection Authority**, Štěpánská 796/44, 110 00 Prague 1, www.coi.cz.