



Viper Linear

MenaceRC – directional 5.8 GHz patch antenna
User manual



Read this manual before use and keep it for future reference.

www.rotorama.com

Contents

1. Product description

1.1 What it is for

1.2 Specifications and package contents

2. Use

2.1 Connecting to the goggles

2.2 Aiming and polarisation

2.3 Care and storage

3. Information for the EU and Czech Market

3.1 Importer and responsible person in the EU

3.2 Disposal

4. Warranty and rights arising from defective performance

1. Product description

1.1 What it is for

MenaceRC Viper Linear is a small directional 5.8 GHz receiving patch antenna with **linear polarisation**. It is mounted on FPV goggles or a video receiver and is designed primarily to receive the signal from video transmitters (VTX) with linearly polarised whip antennas, as used on Tiny Whoop, ToothPick and other micro drones. According to the manufacturer, it is compatible with both whip and Vee antennas.

When a linearly polarised signal is received with a circularly polarised antenna, there is a loss of approximately 3 dB, i.e. half of the power. A linearly polarised antenna eliminates this loss, extending the range and improving image clarity – outdoors as well as when flying indoors.



Front side of the antenna

1.2 Specifications and package contents

Manufacturer	Menace RC (United Kingdom), www.menacerc.co.uk
Product designation	VIPER 5.8Ghz LINEAR (printed on the back of the antenna)
Frequency	5800 MHz
Bandwidth	300 MHz
Gain	8.0 dBi
Beam width	90°
Polarisation	linear
Connector	SMA (according to the manufacturer, fits Fatshark goggles)
Dimensions	42 × 38 × 19 mm
Weight	12 g
Package contents	1× VIPER antenna
Not included	FPV goggles or video receiver, SMA / RP-SMA adapter, extension cable, additional antenna

2. Use

2.1 Connecting to the goggles



Back side, SMA connector

- ① Make sure that the connector on the goggles or video receiver matches the antenna connector (**SMA**). Goggles with an RP-SMA connector require an adapter, which is not included.
- ② Connect and disconnect the antenna with the goggles switched off.
- ③ Fit the antenna onto the connector and tighten the coupling nut **by hand**, without tools and without force. An overtightened thread or leverage on the connector can damage the connector of both the antenna and the goggles.
- ④ On diversity receivers (two antenna inputs), the patch antenna is usually combined with an omnidirectional antenna on the second input, which covers the close surroundings and the area outside the direction of the patch antenna.

2.2 Aiming and polarisation

- The antenna is **directional**. Point its front side (the side with the logo) towards the area where you fly; reception is best within a sector of approximately 90° in front of the antenna. Behind the antenna and to the sides, reception is considerably weaker.
- The antenna has **linear polarisation**, so its orientation relative to the video transmitter antenna on the drone matters. If the image is permanently weak or fades in a certain drone position, rotate the antenna by 90° and test which position gives better reception.
- The antenna is intended to receive the signal from video transmitters with a linearly polarised antenna. For transmitters with a circularly polarised antenna, use a circularly polarised antenna of the same hand (LHCP / RHCP).
- There should be no obstacles between the antenna and the drone - metal objects, walls and trees in particular attenuate the signal considerably.

2.3 Care and storage

- Protect the antenna from drops and impacts and do not use it as a handle when handling the goggles.
- When carrying the goggles, remove the antenna or protect it so that it cannot lever the connector.
- Protect the antenna from moisture, dust and high temperatures. Remove dirt with a soft dry cloth.
- Do not modify the antenna in any way – modifications may change its properties.

3. Information for the EU and Czech Market

3.1 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@rotorاما.cz
Phone	+420 252 252 098
Website	www.rotorاما.com

3.2 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>.

4. 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 3.1.
- 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.