Control horn with clevis

Set of 10 pcs for RC airplanes
Instruction manual



Read this manual carefully before installation and keep it for future reference.

www.rotorama.com

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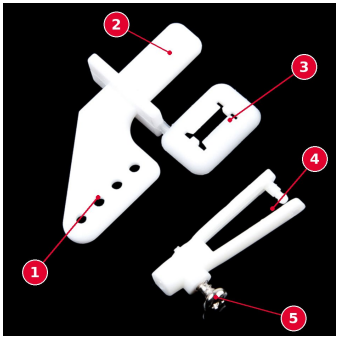
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1. Product description

1.1 Purpose

The control horn transfers the movement of the pushrod from the servo into deflection of a control surface – elevator, rudder, aileron or flap. The set contains ten horns including clevises for attaching the pushrod and screws. It is intended mainly for RC airplanes made of EPP or 3D-printed.

The horn is pushed through the control surface with its pin and secured from the opposite side with the backing plate. The pushrod is fixed in the clevis with the screw, and the clevis snaps into one of the holes in the horn. The choice of hole sets the size of the control surface deflection.



Parts of the set: ① horn with holes for the clevis, ② pin with seating surface, ③ backing plate, ④ clevis, ⑤ screw for fixing the pushrod

1.2 Technical data and package contents

Product designation	Control horn with clevis (10pcs)
Material	plastic
Horn weight	0.48 g
Clevis weight	0.34 g
Horn thickness	1.6 mm
Total horn height	31 mm
Height of the outer part of the horn	18 mm
Package contents	10× horn 10× clevis 10× screw

Not included: pushrod (wire), servo, servo arm, glue or tools.

2. Use

2.1 Safety instructions

- The set contains small parts that a child could swallow. Keep it out of the reach of children.
- Take care when cutting slots in the control surface with a sharp knife and protect your fingers.
- When working with glue, follow its manufacturer's instructions and ensure good ventilation.
- Before powering up the model, remove the propeller or make sure the motor cannot start unintentionally. The servo may move abruptly after power-up.

2.2 Installing the horn in the control surface

① Choose a position on the control surface in line with the pushrod from the servo so that the pushrod runs as straight as possible and does not bind anywhere.

② The holes of the horn should lie as close as possible directly above the hinge line of the control surface. This gives equal up and down deflection.

③ Cut a narrow slot in the control surface for the horn pin. The slot must not be larger than necessary.

④ Insert the horn pin into the slot so that the seating surface rests against the surface of the control surface. For a stronger joint, glue the pin with an adhesive suitable for the control surface material.

⑤ Separate the backing plate from the horn (on the moulding it is usually joined by a thin bridge), trim the remainder of the bridge and slide the backing plate onto the pin from the other side of the control surface all the way to the surface.

⑥ Shorten the protruding part of the pin so that it does not stick out above the backing plate.

⑦ Let the glue cure completely before the next step.

2.3 Connecting the pushrod and clevis

① Switch on the transmitter and the model and set the servo to its neutral position. Secure the control surface in the centre position, for example with tape.

② Pass the end of the pushrod (wire) through the hole in the head of the clevis.

③ Snap the clevis into the selected hole of the horn.

④ Check that the control surface is in neutral and tighten the pushrod firmly in the clevis with the screw. Do not overtighten the screw so that the plastic does not crack.

⑤ Move the transmitter sticks to check that the control surface moves in the correct direction, smoothly and without binding over its full range.

※ The closer the selected horn hole is to the hinge line, the larger the control surface deflection. A hole further away gives smaller deflection and finer control.

2.4 Inspection and maintenance

- Before every flight, check that the clevis is snapped in and that the pushrod is held firmly in the clevis.
- The horn must have no play in the control surface. Re-glue a loose horn.
- Always replace a cracked or otherwise damaged horn or clevis with a new one. Failure of the control surface linkage leads to loss of control of the model.

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@rotorama.cz
Phone	+420 252 252 098
Website	www.rotorama.com

3.2 Disposal

- The product is not electrical equipment. Dispose of the plastic parts in separated waste according to the rules of your municipality and the metal screws in metal collection.
- Dispose of the packaging in separated waste according to the type of material.

The information in this manual describes the situation under the law of the Czech Republic. **The law of the country in which the product is used always prevails.**

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.