



VDRC
Instructions for Use

VDRC - Vertical Drone Rope Carrier

The VDRC system was designed to pass a rope between two points using a drone.

The rope that is being passed is a small diameter rope that allows connecting afterwards a proper working rope.

The VDRC system can be used to pass a rope between two teams, above obstacles or to hard to reach places.

For Proper techniques and methods of using this product contact us.

info@highnovate.com

Made in Israel using foreign and domestic materials

⚠ These instructions can not replace proper product training

⚠ The drone itself, operating the drone and flight safety are not part of these instruction. These subjects should be taught by a professional capable of teaching it.

⚠ Under no circumstances Highnovate will not be responsible for any matter that is related to flight safety and any consequences that might occur while operating the drone.

⚠ These instructions DO NOT tell you everything you need to know.

⚠ Do not use unless you can and will understand and assume all risks and responsibilities for all damage/injury/death that may result from use of this equipment or the activities undertaken with it.

⚠ Everyone using this equipment must be given and thoroughly understand the instructions and refer to them before each use.

⚠ Do not use around electrical hazards, moving machinery or near sharp edges or abrasive surfaces.

⚠ We are not responsible for any direct, indirect or accidental consequences or damage resulting from the use of our products.

⚠ The rope supplied with the system is NOT a rope that is made for load lifting or to be part of a personal protection equipment

⚠ Stay up to date! Regularly go to our website and read the latest user instructions.

(EN) ENGLISH

Limitations On Use:

It must be used only for the specific purpose it was designed for; it must not be used for any other. Each user is responsible for making a risk assessment prior to using this product.

Lifetime:

Unlimited for metal products, but will often be much less depending on conditions and frequency of use; it could even be a single use in some cases.

Environmental Factors:

Moisture, ice, salt, sand, snow, chemicals and other factors can prevent proper operation or can greatly accelerate wear.

Medical:

It is intended for use by medically fit, specifically trained and experienced users.

Compatibility:

The VDRC will fit most commercial drones on the market. If for some reason the drone that you have can not be connected to the VDRC system, please contact us for support.

Inspection Before & After Each Use:

In addition to the detailed periodic inspection, the VDRC must be inspected before and after each use. Check all parts for cracks, deformation, corrosion, wear, etc. Verify release mechanism and all moving parts move freely and function properly in every respect. The function of these parts must not be impaired by foreign matter such as dirt, ice, corrosion, etc.

Inspection During Use:

Regularly inspect and monitor your system, confirming the correct connecting of the VDRC to the drone which should be stable.

Prevent any contact between the rope and the rotors or other moving parts.

Detailed Inspection:

In addition to inspection before, during and after each use, a detailed inspection by a competent inspector must be done at least every 12 months or more frequently depending on amount and type of use, government regulations, and environmental conditions.

Make a copy of these instructions and use one as the permanent inspection record and keep the other with the equipment. It is recommended that a similar record is kept for all components used in a system.

Maintenance & Storage:

Clean plastic parts, if necessary with wet cloth, then allow to dry naturally completely before storing. If there is still dirt in the moving parts use air pressure to remove it. Light surface corrosion may be removed with a wire brush (no power tools). Retire if corrosion is heavy. Store or transport in a dry place away from extremes of heat and cold and avoid exposure to chemicals.

Repairs or modifications to equipment are only allowed by the manufacturer or those authorized in writing by the manufacturer.

Re-Sale:

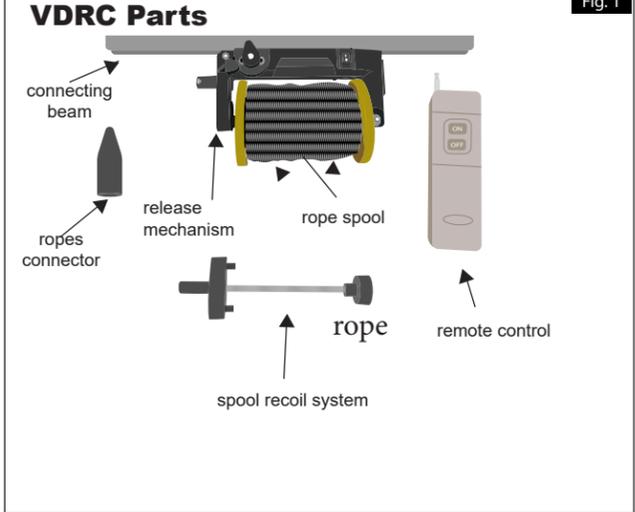
If re-sold outside the original country of destination, it is required that the re-seller of the VDRC will provide instructions for use, maintenance, periodic examination and for repair in the language of the country in which this product is to be used.

It is recommended that the user marks the device with the date of the last and next inspection.

Principal Material VDRC - Plastic
Spool - PU and Aluminum
Recoil system - Plastic and steel

Specifications:

Weight - VDRC system - 220gr
Spool with 200m 1 mm dyneema rope - 220 gr
Total weight - 440gr
Rope - 1 mm Dyneema rope, 130kg MBL



Pre flight preparation

a. Open the release mechanism

b. Insert the rope spool

c. Close the release mechanism
Press the "on" button on the VDRC

d. Switch remote control to "on"
open the antenna

e. Connect the rope on the spool
with a work rope using the ropes connector

f. connect the VDRC connecting beam
to the drone using zipties
make sure the beam is connected firmly to the drone.

DATE	CONDITION	INSPECTOR

Tx/Rx info:

working voltage: DC 3.3V-15V
module dissipation: 7mA
frequency: 315MHz
distance: about 300m LOS
9V battery

Motor:

DC gear motor
6V-18V
9V battery

Flight

a. Hold the Drone and the VDRC firmly in your hands, away from your head. Use gloves and helmet for protection.

Make sure before the flight that no one can be effected or injured from the rope or a spool released from above.

b. Once the rotors start rotating and the drone is stable in the air, let go of your hands and hold the rope gently, make sure not to pull down the drone!!

c. When the drone reaches the desigered place for release, press the "on" button on the remote control and wait for the rope spool to fall.

d. After the spool has reached the ground you can pull the rope and the working rope will follow.

Use gloves while pulling the rope to prevent injuries.

Recoiling the rope

a. place the spool on the spool recoil rod and screw the tightening nut as shown
make sure the the pins are in the corresponding holes on the spool

b. connect a drill to the bit of the recoil system, place the rope on the spool and start recoiling

