

TIPULA

Remote anchor placement using a drone

**WARNING!
EXPERT USE
ONLY**

Made in the Israel using foreign and domestic materials

- ⚠ These activities are inherently dangerous and carry a significant risk of injury or death that cannot be eliminated.
- ⚠ 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.
- ⚠ You must always have a backup-never trust a life to a single tool.
- ⚠ You must have a rescue plan and the means to implement it. Inert suspension in a harness can quickly result in death!
- ⚠ 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.
- ⚠ Stay up to date! Regularly go to our website and read the latest user instructions.

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(EN) ENGLISH

The TIPULA Is a device that allows placing an anchor point in a hard to reach places using a drone. It was designed to be able to carry a hook , lift it with the drone up to the desired place and then release it in place using a remote control. A rope or ladder can then be lifted up using a BELLA system.

This manual will not teach you how to fly the drone. Before use make sure you got proper training and certification when applicable.

Limitations On Use:

It is impossible to imagine all the ways this equipment can be misused. 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. The Product was designed to work in a temperature range of -20 to +50 degrees celsius.

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. never use this device if you are feeling tired, drowsy or under the effect of alcohol, drugs or any other substance that may effect your judgement or limits your physical ability.

Compatibility:

Any equipment used with the TIPULA that will be connected to the hook after its placement must be certified for use as Personal Protective Equipment (PPE). An incompatible connection can cause accidental disconnection, breakage, or affect the safety function of another piece of equipment. You must verify the suitability of this equipment for use in your application with regard to applicable governmental regulations and other standards on occupational safety.

Inspection Before & After Each Use:

In addition to the detailed periodic inspection, the TIPULA must be inspected before and after each use. Check all parts for cracks, deformation, corrosion, wear, etc. Verify that all moving parts move freely and function properly in every respect. Check that the remote controls the motor and that the batteries are in good condition. For all the checks for the BELLA system and the hook refer to the relevant user manual. The function of these parts must not be impaired by foreign matter such as dirt, ice, corrosion, etc. Make sure that the connection cords have no cuts or damage, connect the cords to the hook using a clove hitch in the middle of the cord or any other knot that will hold. reinforce the cord to the hook if needed using tape or zipties.

Inspection During Use:

Regularly inspect and monitor your system, confirming the correct positioning of the TIPULA on the drone connection points and that the system is secured properly. Make sure that the cords that connect the hook to the release mechanism are in the correct place and that the mechanism is locked before taking off. Make sure that the Bella system is connected properly according to the BELLA user manual. Make sure the cords length are adjusted so the hook will be stable and all cords will share the load simultaneously. Make sure that the hook is in the correct direction during flight.

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.

It is best to issue new gear to each user so they know its entire history. Periodic detailed inspection shall use the same criteria as inspection before and after each use. Additionally, periodic inspection will verify legibility of product markings. User safety depends upon the durability and correct function of the equipment.

Maintenance & Storage:

Clean if necessary with fresh water, 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.

Retire from service immediately if the TIPULA:

1. Does not pass inspection or there is any doubt about its safety.

Kit Parts

- A. Hook - supplied by the user
- B. Connection cords X2
- C. TIPULA leg X 4
- D. TIPULA body X 1
- E. Remote control X 1
- F. BELLA Kit X 1

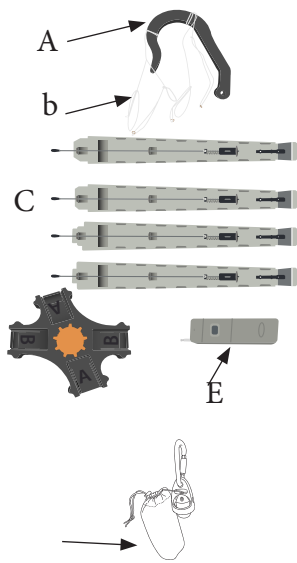
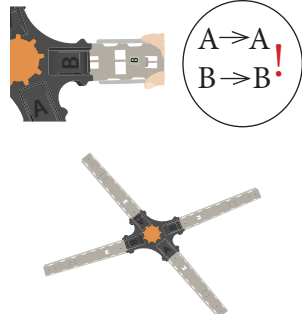


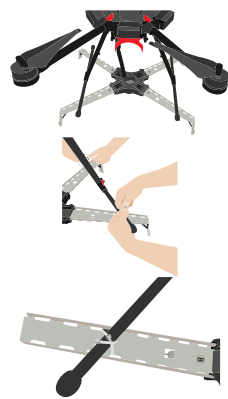
Fig. 2

Preparation for use

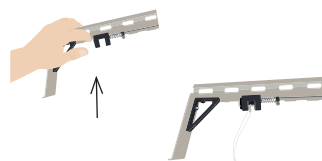
1. Take the TIPULA body (D) and connect all four legs (C). Connect A leg to A place in the body and B legs to B place in the body. Make sure it is firmly in place.



2. Connect the Tipula to the drone legs using zipties. Make sure the TIPULA is secured in place, if needed add zipties. Pay attention that the zipties does not interfere with the release mechanism and are not touching any moving parts.



3. Connect the Hook to the Tipula. Gently take back the plate that opens the release mechanism, insert the connection ring of the cord and let go of the plate. Make sure all four cords are in place and that there are no tangles. Adjust the length of the cord so that the hook will be hanging from 4 tight cords



5. Place batteries in both remote and TIPULA body.
6. Press the button on the TIPULA body when ready for flight

3. Is misused, altered, damaged, exposed to harmful chemicals, etc.

Do not return the TIPULA to service unless it is inspected and authorized by a person competent to do so. Consult the manufacturer if you have any doubts or concerns.

Anchorage Requirements:

The TIPULA system is used for carrying a hook that should be placed only on solid parts in a building that are strong enough to hold the force that may be applied during usage. It can be placed on railings, concrete beams or other elements that are strong and stable. The minimum strength of the anchor that the hook should be placed on is 1300kg and it should be at a diameter that matches the hook manufacturer instructions . If possible consult an engineer or a person qualified to assess the strength of the anchor. Look the hook instruction manual for exact anchor requirements.

If possible make sure that the anchor is stable before the use. Try to move it to the sides and to the direction in which it should be loaded. Check that it is not moving or tilting. The anchor should normally be above the user's position and conform to the applicable standard. The placement should take into consideration the possibility of falling down and should minimize the potential fall distance or hitting an obstacle. You are responsible to verify the suitability of this equipment and your anchor and other gear with regard to government and all other applicable standards. The clearance under the user must be sufficient to prevent him from striking an obstacle in case of a fall (the length of the connector can influence the height of a fall).

Re-Sale:

If re-sold outside the original country of destination, the re-seller of the TIPULA is responsible to 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 Aluminum alloy, plastic.

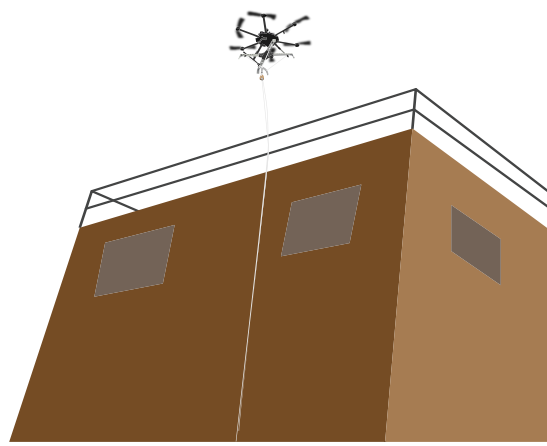
Specifications:
Drone minimum required payload - 2.5kg
Dimensions :
Weight - TIPULA system 1.38kg

case dimensions: 640x410x200 mm
TIPULA open dimensions : 780x560x125 mm
Effective transmitter range - 350m LOS

Remote RF 433Mhz
Battery 6F22 9V

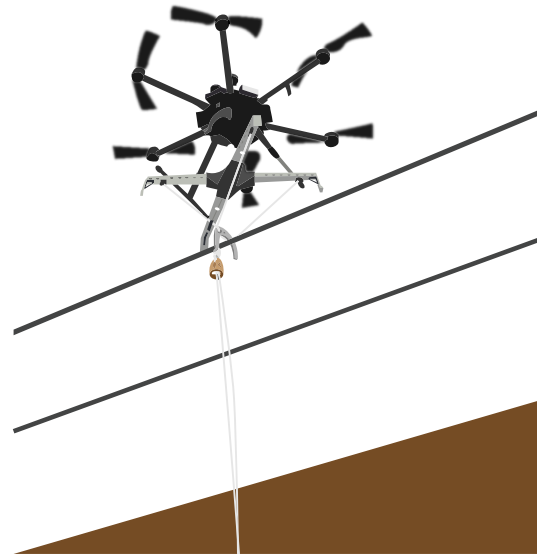
Flight

1. Launch the drone with the hook and the BELLA connected to it Fly the drone to the placement point, make sure the BELLA ropes are not getting caught in the way.



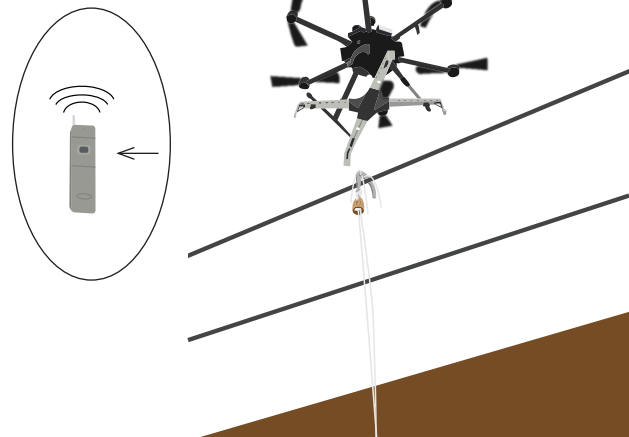
Placement

2. Place the hook in place , make sure the hook sits on the beam/railing before releasing



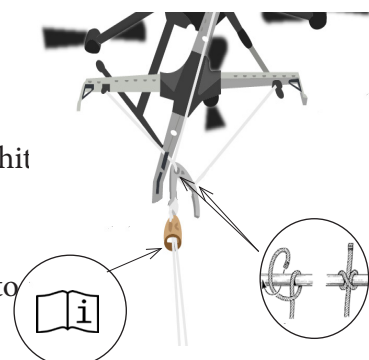
Release

3. Press the release button on the remote and wait until the hook is released.



Hook Connection

1. Connect the cords to the hook using clove hit
2. connect the BELLA to the hook
(read BELLA manual for instruction)



DATE	CONDITION	INSPECTOR

DOCUMENTATION	
Model	
Complete Batch #	
Year of Manufacture	
Purchase Date	
Date of 1st Use	
User	