

# **TOW** POWER

## **USER GUIDE**

### **AIRCRAFT TOWING SOLUTIONS**

Model: TP20

Capacity to tow aircraft up to 22.000 Lbs/10.000 Kg.



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# 1 SAFETY NOTES



- Failure to follow the instructions may cause personal injury and even death.

- Failure to follow the instructions may cause material damage to the respective equipment.
- It is extremely important that the towing operation is performed according to the aircraft manufacturer's instructions/limitations.
- The operation must be in places free from obstacles before loading the aircraft.
- Wheel chocks placed on the aircraft before loading and unloading it from the Towpower.
- The Towpower must be operated on a flat and paved surface.
- Never leave the Towpower unattended running
- During towing, always have visual contact with the Towpower.
- Be sure to adjust the Towpower to a slower speed when near obstacles.

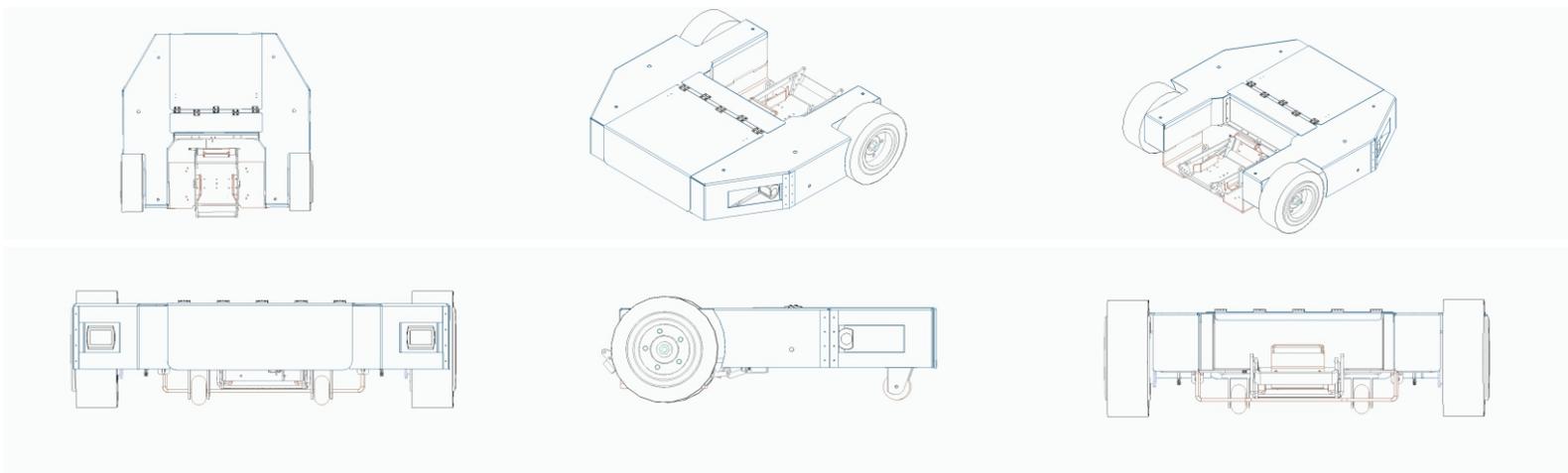
# 2 OVERVIEW

The Towpower TP20 is an aircraft towing equipment developed for precise maneuvers, without consuming polluting fuels, and with low operating noise. Its simple operation brings ease, efficiency and safety to the operator. To comply with these characteristics, it is essential to read and understand the instructions described in this guide before operating it.

# 3 UNIT FEATURES AND CAPABILITIES

- Dimensions** .....125cm x 135cm x 41cm
- Weight** .....350 kg
- Maximum Towing capacity**.....20.000 Lbs/9.000 Kg
- Tires** .....2 16-inch solid rubber tires
- Batteries** .....4 12Vdc/35AH lead-acid batteries
- Structure** .....In carbon steel, laser cut and finished with high-resistance electrostatic painting
- Motors** .....2 24Vdc motors, brushed, reversible and coupled to a 32:1 reduction box

# 4 TOWPOWER FLOOR PLAN

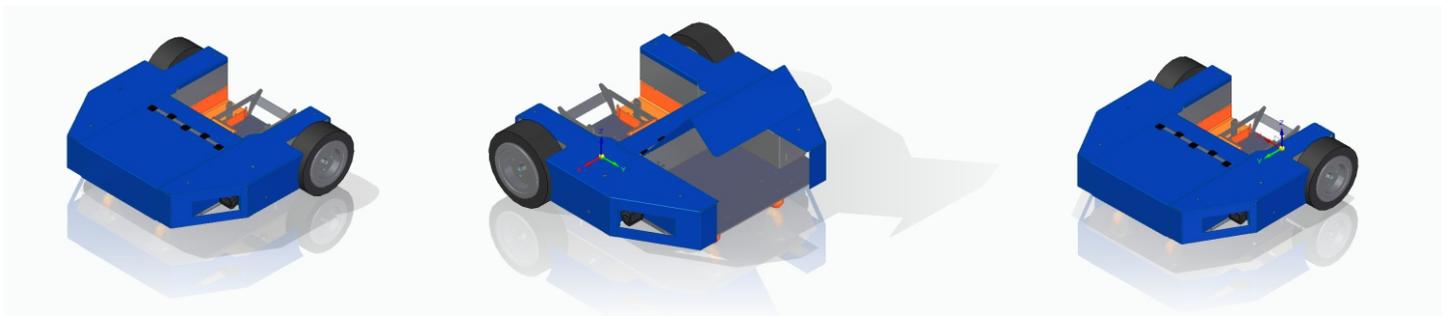


# 5 HOW TO OPERATE THE TOWPOWER

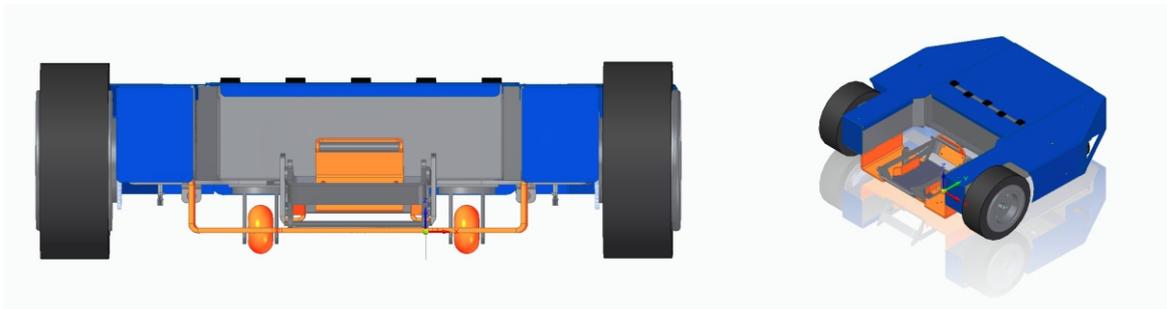
## Key points about using the Towpower:

- ✓ Open the hood and turn the ON/OFF switch located on the control panel to the "ON" position.
- ✓ Check the battery charge indication, if it is below 23.5VDC, recharging is necessary according to the procedure described in this guide.
- ✓ Make sure the orange light is on.
- ✓ Close the hood.
- ✓ Press the On/Off button on the control, make sure the remote control has enough battery, otherwise charging is necessary. Follow the remote control operating instructions below to operate the remote control.

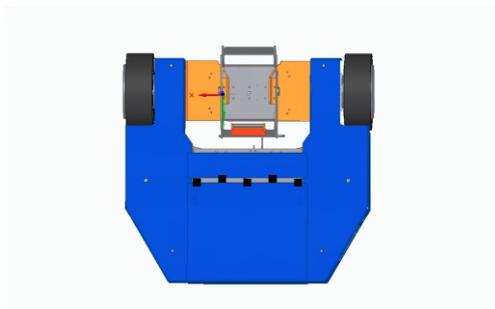
*Front view*



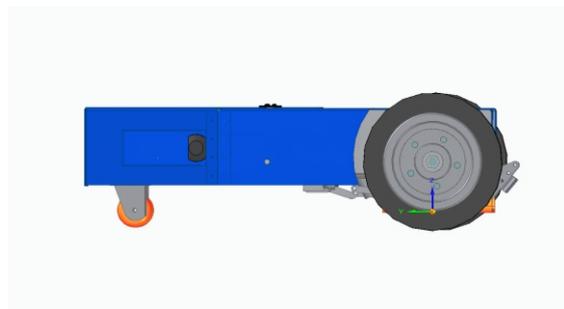
*Back view*



*Above view*



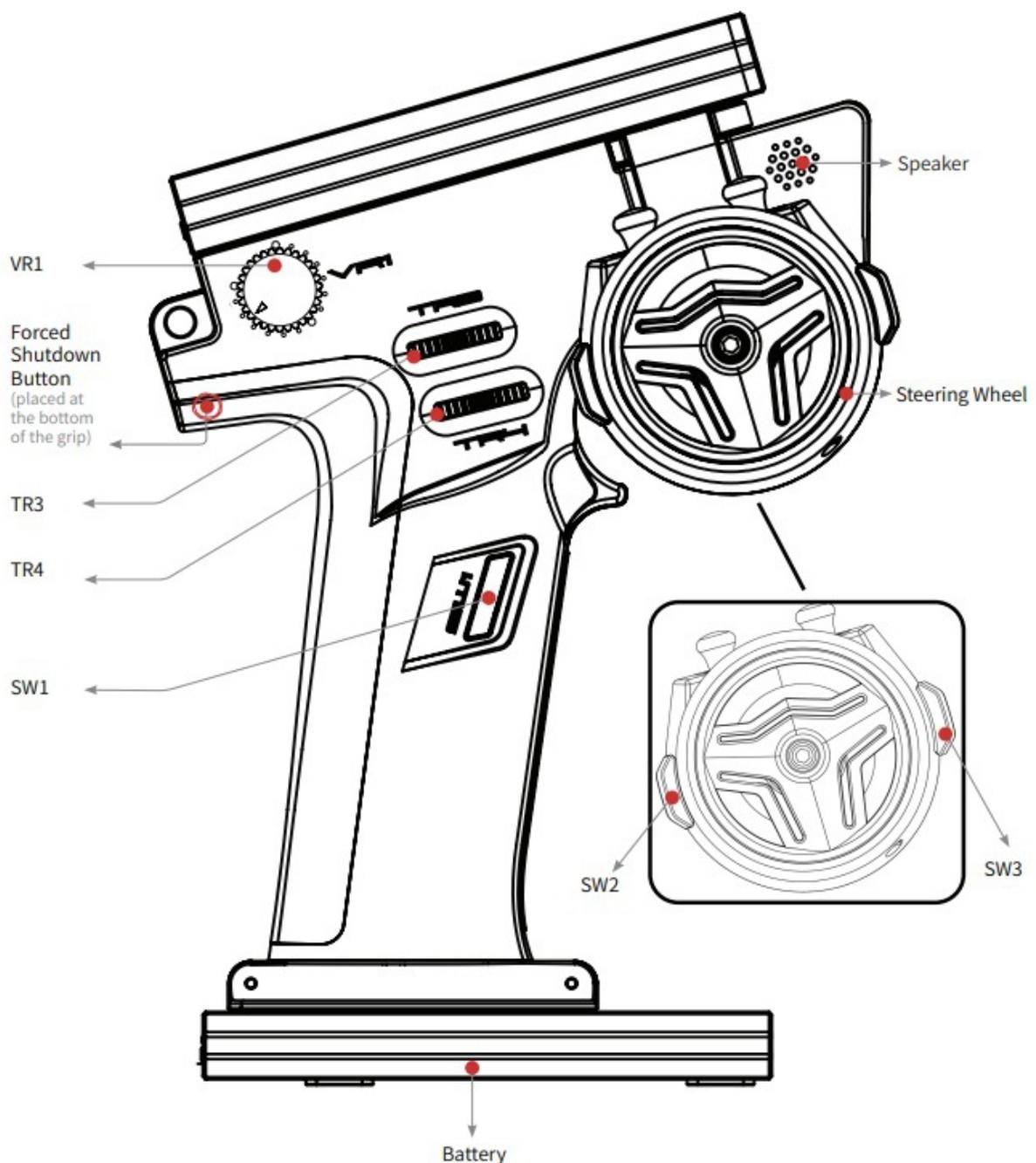
*Side view*

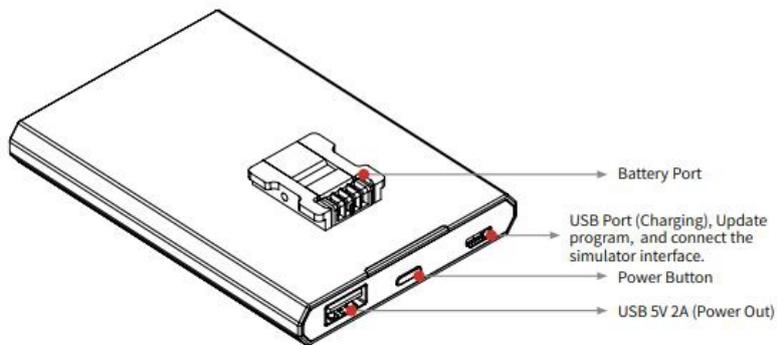
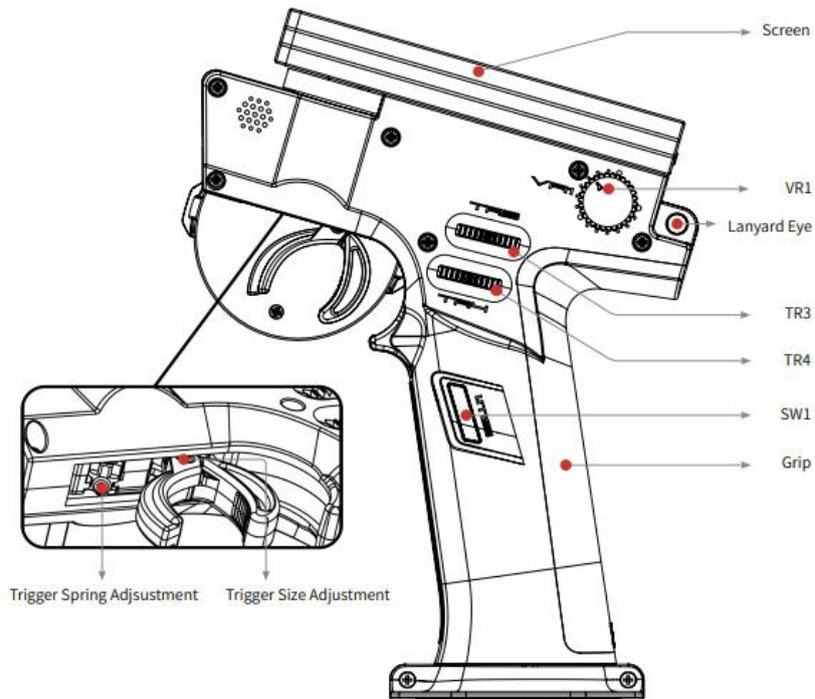
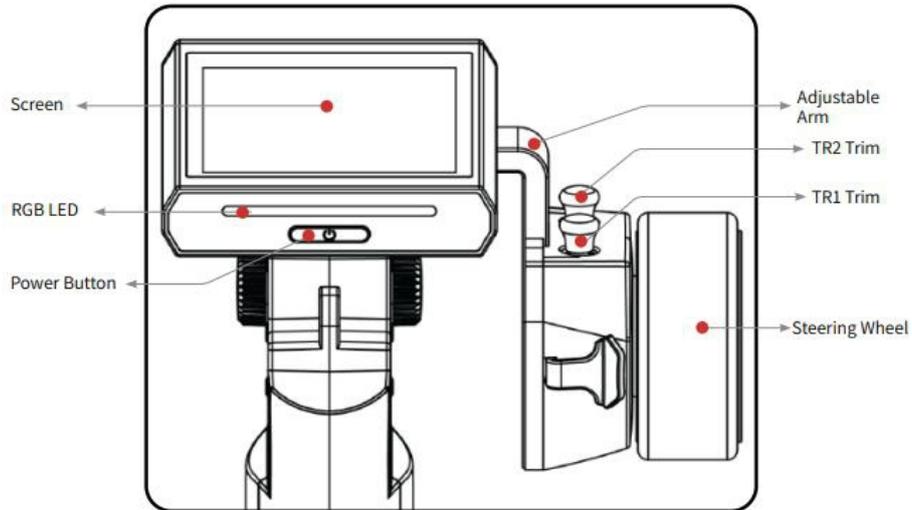


# 6 REMOTE CONTROL

## Key points about using the Remote control:

- ✓ Power button - press and hold to turn on/off
- ✓ Steering Wheel - turns the Towpower left or right
- ✓ Trigger - accelerates Towpower forward or backward
- ✓ Battery recharge - Via USB port
- ✓ Activation of the Towpower lights is done by pressing the SW1 button
- ✓ The tray is unlocked by pressing the SW3 button





# 7 HOW TO LOAD THE AIRCRAFT ONTO THE TOWPOWER

1. Chock the aircraft's main wheels.
2. Unlock the Towpower tray using the remote control.
3. Align the Towpower with the aircraft's nose wheel.
4. Accelerate the Towpower backwards to meet the nose wheel rising in the tray until it locks.
5. Visually ensure that the tray is properly locked.
6. Remove the main wheel chocks and begin towing as needed.



# 8 HOW TO UNLOAD THE AIRCRAFT ONTO THE TOWPOWER

1. After the aircraft is in the desired location, chock the main wheels.
2. Align the Towpower with the longitudinal axis of the aircraft (make sure the tray is also aligned).
3. Align the Towpower so that the aircraft's nose wheel does not weigh down the ends of the tray.
4. Activate the remote control (Button SW3) to unlock the tray. Visually check that it has been unlocked, or lift the tray lock by hand as an alternative method.
5. Accelerate the Towpower forward, this way the aircraft will be unloaded.

# 9 HOW TO RECHARGE THE BATTERY

Connect the power cord to the Towpower located on the control panel and the other end to a 127/220 VAC outlet. Recharging can last up to 4 hours.

## Notes

- ✓ *Recharging must be done in a well-ventilated location.*
- ✓ *The main switch must be set to "OFF".*
- ✓ *Never operate Towpower while the battery is recharging.*

## General Information

- ✓ Towpower is water resistant equipment, however, for a longer usufull life, it is recommended to keep it in a dry and ventilated place.
- ✓ Cleaning can be done with a damp cloth and neutral soap. Do not use pressurized water.
- ✓ Do not apply chemicals to the tires.



# TOW POWER

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