

TOWER

USER MANUAL

PANTHER 
PANTHER



INTRODUCTION

Congratulations to your decision of purchasing or renting your Panther Tower. We are pleased that you made your decision in favor of equipment, which combines state-of-the-art technology and many years of experience in manufacturing camera support equipment.

Selected materials and a great know-how ensures that in practice you have a wide variety of possibilities, which you will appreciate during shooting. Your new Panther Tower is a high-quality and modern tool giving the creative cameraman a new easy way to control your movements and get more flexibility.

The Panther Tower is a very useful equipment, developed by specialists for specialists in order to meet the expectations of every cameraman or grip.

To ensure that you will love working with your Panther Tower and that all requirements during shooting can be fulfilled considering utmost safety and reliability, please carefully read this user manual.

With our best wishes



Andreas Fitz

CEO | Executive President
Panther GmbH

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PREPARING

Prepare your car

First you have to prepare the vehicle where you want to mount the Tower.



Please take care of a safe and secure preparation. Tighten all screws and check every tube connection twice. We can not be held liable for incorrect attachment of your car rig.



■ MOUNT THE TOWER

Mount the Tower

After the preparation of your main car rig you can mount the Panther Tower on both ends with clamps. The clamps are designed to be mounted on tubes with diameter of 48mm.

Please make sure, that the lower side of the tower is at the bottom. Please check if the screws are tight. After this you can go on with the next step.



ANGLE ADJUSTMENT

Angle Adjustment

The Tower is designed for vertical rotation. You will need a ladder to do so. To adjust the angle of the Tower you have to open 4 screws on the upper side and 4 screws on the lower side.



After all screws are opened you can rotate the whole tower into the desired direction by simply rotating with your hands. When it is in the desired direction, tighten the screws to fix the Tower.



POWER SUPPLY

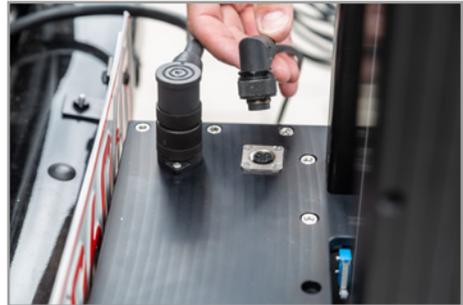
Power Supply for the Tower

To supply the Tower with power you need **2x 24V, max. 20 A (galvanically separated)**.

We recommend to use the power case (310289). It supplies 24V on each (outlet) socket.



Take the power case and put it inside of your car (passenger seat for example). After that you can plug in the power cable and handset cable into the Tower.



Now go on and attach the cables on your car. Please make sure that you fix them to prevent unintentional flutters of the cables.



POWER SUPPLY

When you are finished with fixing all cables you can plug in the power cable into the power case. You have two plugs at this end of the power cable - please make sure that you plug in both of it.

The handset cable has to be plugged into the handset.

After you have done this steps your set up should look similar to the one in the photo below:



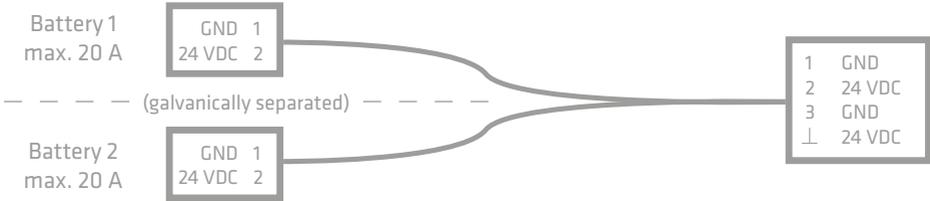
Now you can go on to the next step. To turn on the Tower you have to press the Power On button on the right side of the power case.



POWER SUPPLY

Wiring diagram

Be sure to use 2x 24V (max. 20 A) power, galvanically separated, in case you supply your own power (battery).



Battery 1 and Battery 2 must be galvanically separated!
We recommend to use the Panther Battery Case (310289)

CHARGING



Charging the Power case

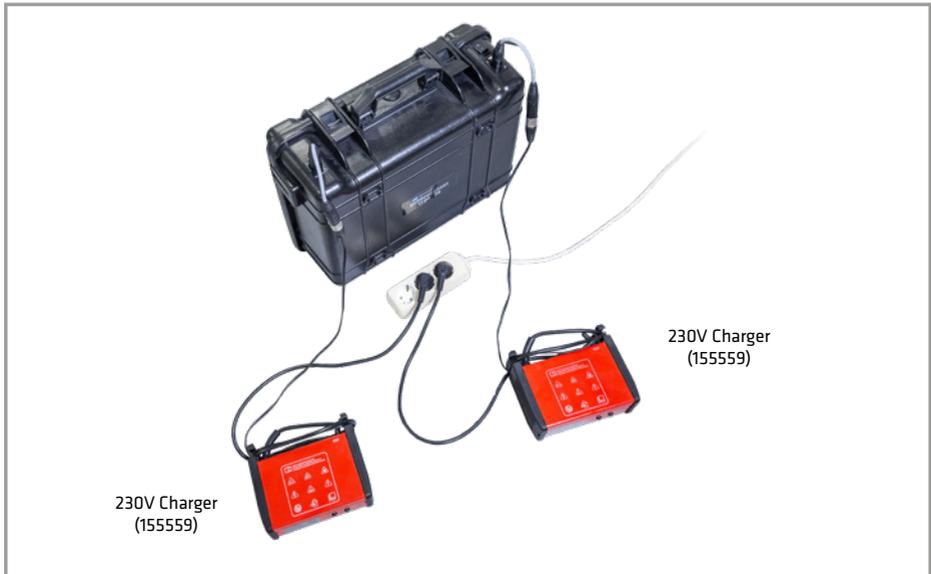
The Power case comes with two power adapter cables. You need them to charge the case.

Plug both of them in one of the two plug-in possibilities of the case.

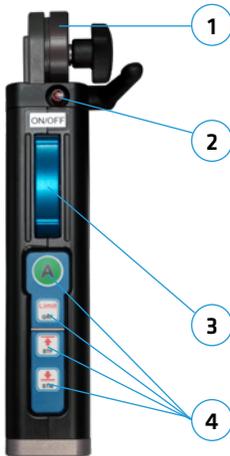


We recommend you to use two Panther 230V Charger (155559) or one Panther Combi Charger (155729).

To charge you just have to plug the chargers' cable in one of the plugged power adapter cables and a second one to the other side and switch the case to „On“.



HANDSET CONTROL



1 Locking plate:

The locking plate attaches the handset control to a 18mm rod.

2 On/Off switch:

The Tower is switched on and off at the main switch. If the Tower is switched on, the switch is lit. It is also used as an „emergency-off-switch“. Depending on model year it can also be a On/Off switch instead of the lit.

3 Rocker switch:

Move the Towers' sledge up or down with the rocker.

4 Program buttons:

Positions or limits can be stored/recalled with the white and green buttons.

The ergonomically designed front panel displays all information at a glance and enables direct control of operating parameters such as speed, ramp setting etc.

Main Switch:

Combination of power on/off, safety power off switch on handset and fuse (that will switch off at a constant current exceeding 10 A).

LCD-Display:

shows the momentary motor voltage

FRONT SCREEN

Control LEDs:

Red, yellow and green LED will light up for 2 sec. if Tower is switched on.

Power: **yellow LED** will light up when the Tower is turned on

Brake open: **green LED** is blinking if a minimum limit is active. It will light up when the brake is open. It is also blinking if a limit is active and the brake is open. If the Tower is not in operation for longer than 4 seconds, the brake will close automatically and the LED will go out/respectively blinking in another frequency.

Battery empty/error: **red LED** is blinking if a maximum limit is active. It will light up when batteries are empty or in case of an error. The error can be determined by removing the electronics cover and looking at the display on the left side of the electronics housing:



Error determination:

b : (on) battery empty

d . (blinking) fault at rotary encoder

E . (blinking) fault at end switch

H . (blinking) fault at handset

L . (blinking) current exceeding normal value

FRONT SCREEN

<p>Super Jib</p> 	<p>Not available for the Tower (only for Panther dolly)</p>	<p>make sure that it is turned to „Off“</p>
<p>Program</p> 	<p>Position ON: Position OFF:</p>	<p>Programming keys on handset are activated. (Note: take care against unintentional operation, see „Programming“.) Limit programming possible</p>
	<p>Position 1: Position 2: Position 3: Position 4</p>	<p>speed: 0...25% speed: 0...50% speed: 0...75% speed: 0...100% (maximum speed)</p>
	<p>soft ramp: medium ramp: hard ramp:</p>	<p>acceleration very soft, hardly perceivable characteristic between soft and hard strong acceleration to maximum speed, strong deceleration until stopping</p>



At all ramp settings (soft, medium and hard), but especially at „soft“, the Panther Tower will still move somewhat after the handset’s manual control switch is released: risk of crushing! Observe safety distances. If there is any danger of crushing, press the „power off“ safety switch on handset.

PROGRAMMING



A
Action



STF
STore First Flag



STM
STore Movement



GRF
Go to Reference Flag

Positions:

Set „Program“ switch on front panel to „ON“.

- Use manual control switch to select the sledge height that will serve as starting point. Press the key marked STF to enter the first point (starting point) in the program memory. (When STF is pressed, only the starting point is memorized, and any existing programs are erased.)
- Use the manual control switch to bring the sledge to the next desired point (= first stopping point). The Panther electronics will memorize only the highest speed used to reach this point manually, and will repeat the move at this speed throughout. If you wish to program a slower movement, you must drive slowly to the stopping point.
- You may drive up or down to any stopping point until it is entered. Enter the point by pressing STM. Note: Stopping point will only be recorded when the sledge is completely stationary. To be quite sure of correct entry of any point, always wait a moment before pressing STM.
- Move to the second stopping point and enter it by pressing STM. Any of up to 255 stopping points are entered by always pressing STM.
- Before recalling or resetting the program in sequence, move to the starting point by pressing GRF. The sledge automatically returns to this point at the maximum speed chosen with the speed selector.
- To recall the program, press A (Action) for every movement in chronological order.



PROGRAMMING

Limits

Set „Program“ switch on front panel to „OFF“.

a. maximum limit:

Use manual control switch to select the sledge height that will serve as limit point. Press the key marked “GRF” and additionally press 2x “STF”. The blinking of red LED confirms the storage. The limit is active. Press “GRF” and additionally 1x “STF” to switch the limit in to the passive (off) mode. Press again “GRF” and additionally 1x “STF” to switch the limit again in to the active (on) mode.

b. minimum limit:

Use “STM” instead of “STF” key and follow instruction as described under a). The green LED is blinking as confirmation for storage.



- a limit can be set active (on) even if the sledge position is outside the limit area.
- Only a passive (off) setted limit can be overwritten
- Positions/limits will remain in the memory even if the Tower is turned off.

ACCESSORIES

Mount accessories to the Tower

To get the best results we recommend to use the Panther stabilization-rigs:

- 310091 ISO Dampener (for horizontal smoothness)
- 310249 Mini Shock Absorber (for vertical smoothness)
- 310371 Maxi Shock Absorber (for vertical smoothness)

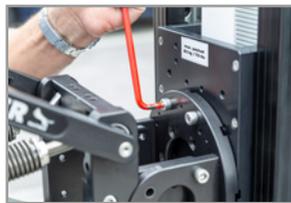
Turn on the Power of the Tower in the front panel and after that on the handset. Use the handsets' rocker to position the Towers' sledge to working height.



Mini Shock Absorber with ISO Dampener

For horizontal and vertical stabilization we recommend you to combine Mini Shock Absorber with ISO Dampener or Maxi Shock Absorber with ISO Dampener.

Take the Mini Shock Absorber and mount it with 4 screws as you see below:



Now you can mount the ISO Dampener via the Mitchell connection.

Make sure that you tighten the all screws for a safe operation!



ACCESSORIES

Mount your Remote Head to the ISO Dampener (via Mitchell). We recommend to use a stabilized head to get the best results.



Maxi Shock Absorber with ISO Dampener

The Maxi Shock Absorber can be mounted directly to the Tower (without Mitchell plate) as you see below. It also can be combined with the ISO Dampener.



You can read in separate manuals how to adjust the Mini- / Maxi Shock Absorber and the ISO Dampener. Please read carefully.

ACCESSORIES

Mounting Possibilities

The Tower is designed to work with following mounts.



Mitchell Plate (136909) with
Distance Adapter 64mm (310828)



Mitchell Adapter (310333)



Tube Flange (228122)

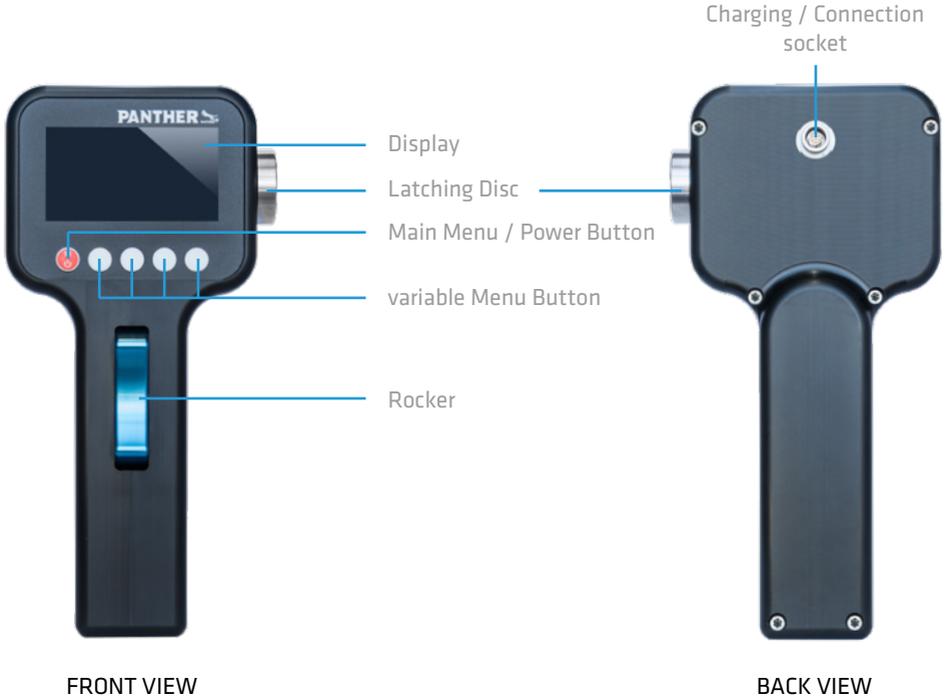


Tube Flange (228122) with
Double Euroadapter (125137)

ACCESSORIES

Wireless Handset

The Tower can be used with the Panther Wireless Handset instead of the standard handset.



Distance

The maximum reach of the Panther Wireless Handset is up to 50m / 164 ft. - this value always depends on your current location (many walls or no walls, forest or field etc.).

Signal interference may occur in certain areas where many signals are present.



RISK OF INJURY

Please check that you always have direct sight to your equipment during the complete time of operation! Using this mobile device without visual contact is at your own risk.

Further information and instructions you can find in the Wireless Handsets' manual.

SAFETY

Safety Blocker

The Safety Blocker is designed to prevent a severe damage of camera equipment.



The mounted equipment of the Tower can slip down, if the V-Belts of the gearbox is loose.

The mounted equipment of the Tower can rattle down if the toothed belt is loose.

The mounted equipment of the Tower can fall down in the very unlikely event of a fracture of the toothed belt.

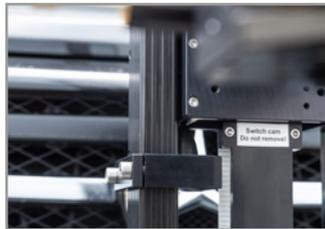
The safety Blocker prevents a slipping, rattling or falling down of the equipment and protects the equipment hitting the ground.

Locate the sledge of Tower (by using handsets` rocker) in a position, which gives enough safety space between mounted equipment (Remote Head, Camera etc.) to the ground.

Set a "limit down" on that position using the handsets` control buttons.



Mount Safety Blocker right underneath sledge and screw tight.



Please make sure that the bumper is on the upper side.

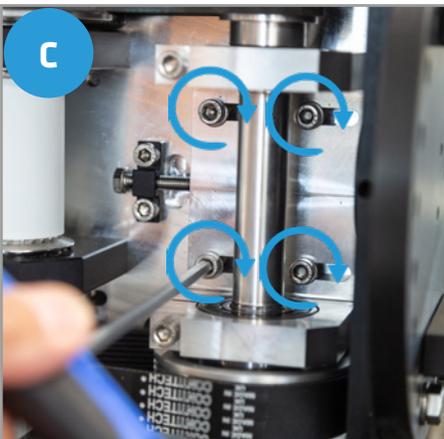
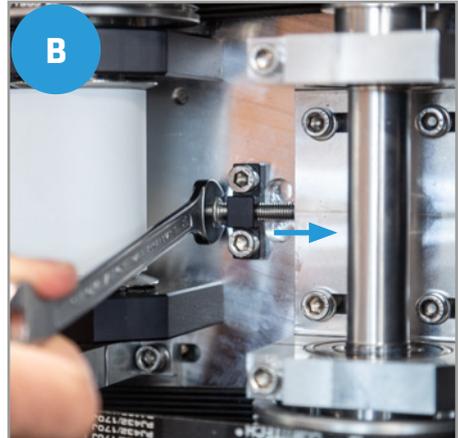
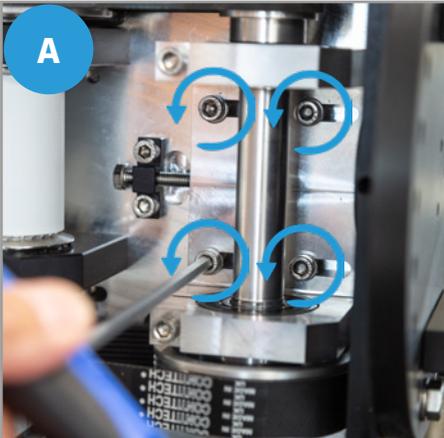
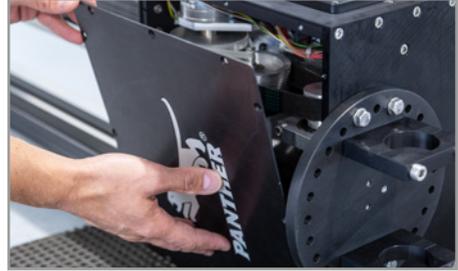
MAINTENANCE

V-Belt

Tighten the V-Belts of Gear Box. To do so, Remove front cover.

There are three v-Belts to be tightened. It is important to tighten one after the other.

1. Tighten first the V-belt which is connected to the toothed belt.



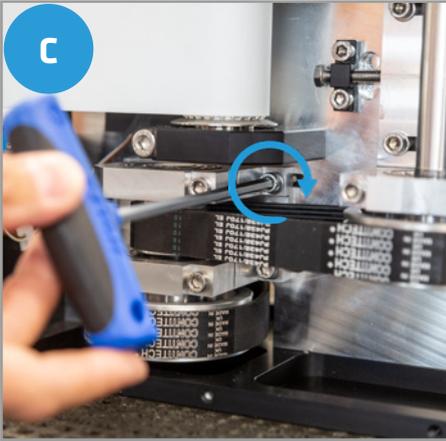
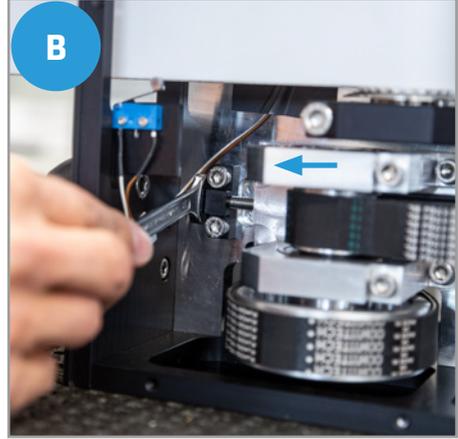
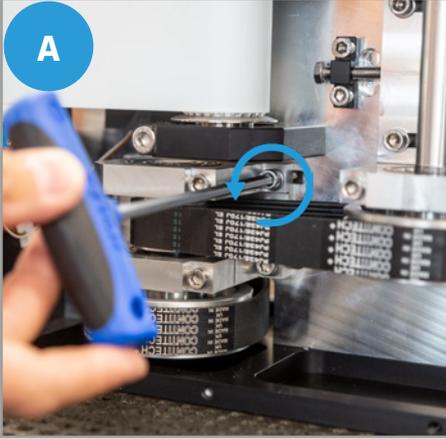
A. loosen the screws of V-Belt axle.

B. adjust the tension.

C. screw tight

MAINTENANCE

2. The second belt to be tightened, is the belt which is in between the other V-Belts.



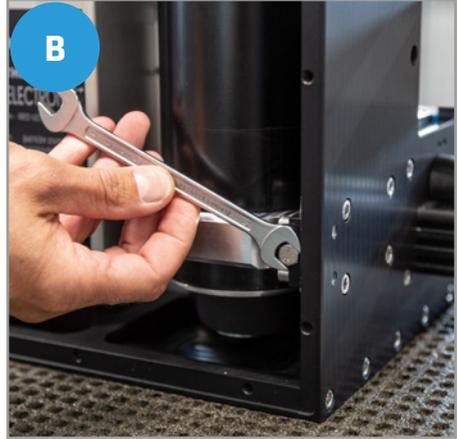
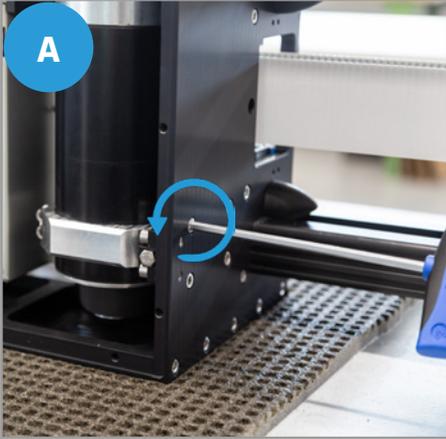
A. loosen all four screws of V-Belt axle.

B. adjust the tension.

C. screw tight

MAINTENANCE

3. The third belt to be tightened, is the belt which is connected to the motor.



A. loosen all four screws of motor bracket.

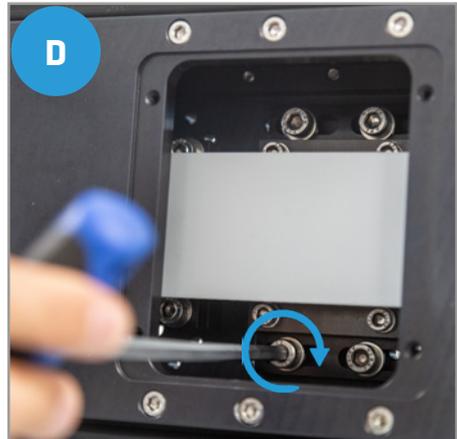
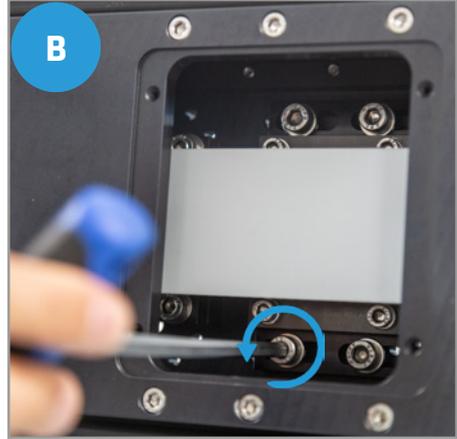
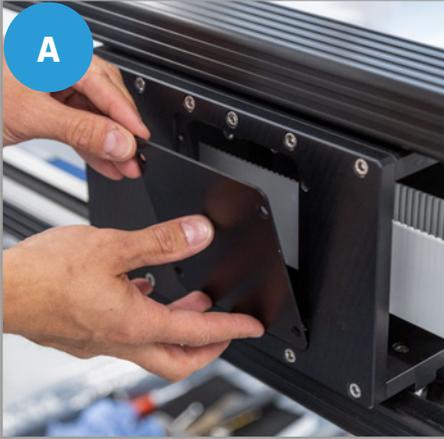
B. adjust the tension.

C. screw tight

MAINTENANCE

Toothed Belt

Tighten the toothed belt of sledge.



A. remove cover from sledge.

B. loosen the screws of toothed belt bracket.

C. adjust the tension.

D. screw tight

NEED FURTHER ASSISTANCE?

If you have any problems with this instructions (or also other problems) please contact our service department. An employee will be very happy to help you until your problem is solved.



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