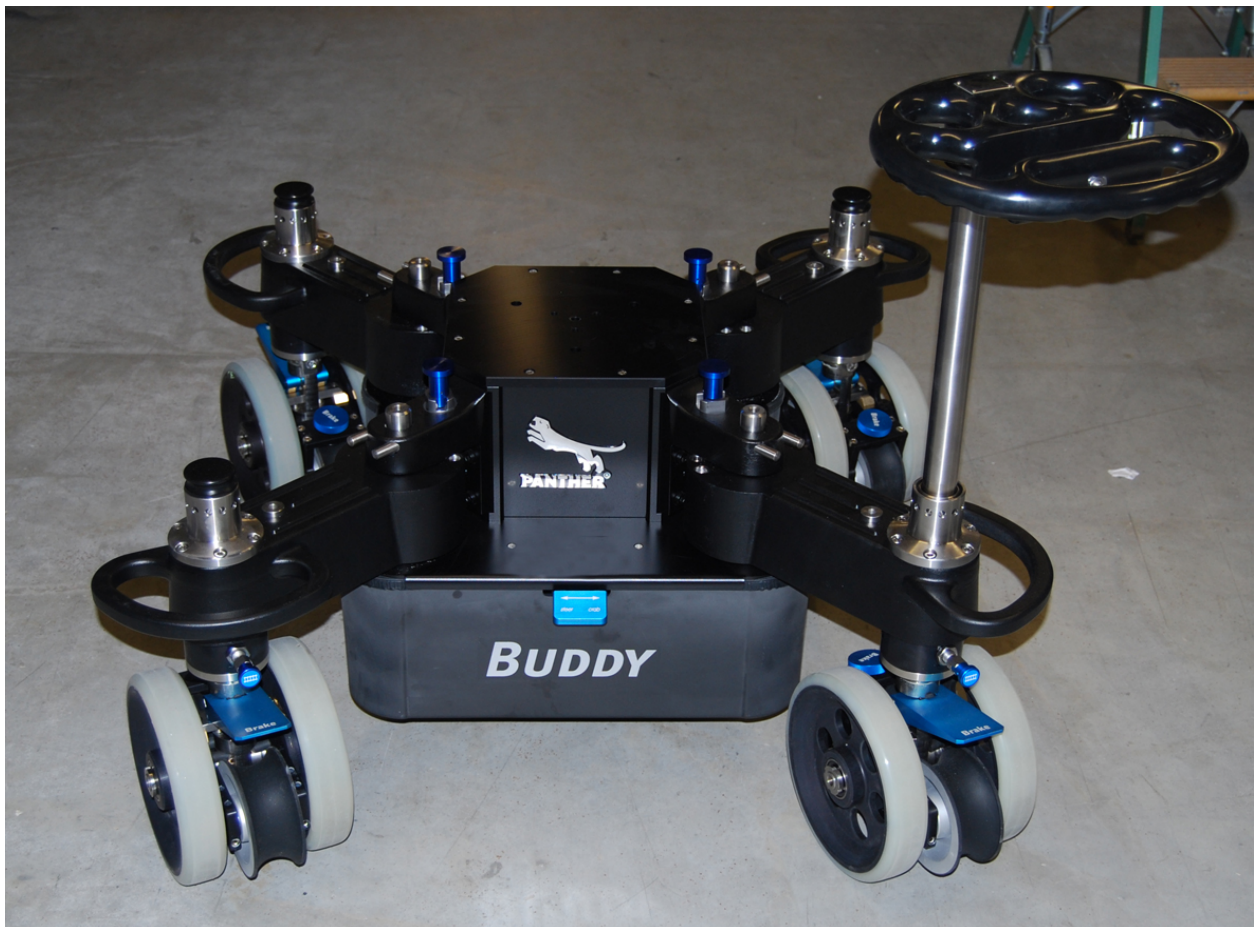




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# Instruction Manual

## Panther Buddy Dolly



# Foreword

Congratulations to your decision of purchasing or renting your PANTHER Buddy dolly. We are pleased that you made your decision in favor of a dolly, which combines state-of-the-art technology and many years of experience in manufacturing camera dollies.

Selected materials, know-how and a solid crab and steer system ensure that in practice you have a wide variety of possibilities, which you will appreciate during shooting.

Your PANTHER Buddy dolly is a high-quality tool giving the creative cameraman the means for camera shots and drives, which could so far only be realized with great efforts or not at all.

The PANTHER Buddy is a dolly 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 Buddy dolly and that all requirements during shooting can be fulfilled considering utmost safety and reliability, please carefully read this operation manual.

With our best wishes

Andy Fitz  
Panther GmbH

# Safety hints

1. Do not start operating the dolly until you have read and understood the operating instruction. All safety hints, information on measures and weights, as well as on maintenance intervals have to be observed.
2. The Panther Buddy dolly may only be operated by competent staff. PANTHER regularly offers training seminars, in which participants receive a certificate after successfully completing the training. For further information and dates please contact us under +49 89 613 900 01.
3. **Lifting, swiveling and drive area** of the dolly including accessories have to be kept free in any case. Possible danger of bruises are marked by yellow warning signs. The safety zone of  $\geq 0,5$  m must be kept free in all directions.
4. **Please observe** that there is a danger of tilting whenever you mount any equipment on the Panther Buddy dolly. Please refer to the load chart. In order to increase the stability, the wheel arms have to be extended during operation.
5. **Attention: do not use the dolly on inclined planes or in vehicles.** By means of wheel brakes the Panther Buddy dolly has to be secured against unintended movements. The subsoil needs to be firm and unyielding. A minimum payload of 2000 kg/m<sup>2</sup> is required of the subsoil.
6. Make sure that unauthorized personnel can not use the dolly if the dolly is out of order. If needed take the right measures against a storm.

# Steering rod



The steering rod steers and pushes the Panther Buddy. It should not be used as seat or standing area. The ergonomic steering crown will accept the handset control.

The Panther Buddy dolly has a „Crab” + „Steer” operation system. This „Crab” (4-wheel) und „Steer” (2-wheel) steering is made possible with quick and unproblematic switching by hand.

The gauge-stable steering geometry of the Panther Buddy dolly was made possible by a patented **shiftbox**. A steering transmission rod or wheel locking bar is now unnecessary.

## Switching over from „Crab” to „Steer”.



Switching over is possible when the Kombi Wheels are in starting position (see pic.), i. e. in direction of movement. The switching operation should be supported by lightly moving the steering rod in a left/right direction.

„Crab“ can be effected from all four wheel arms, whereas „Steer“ can only be effected from the two wheel arms on the side of blue switching lever (operating side).

### Attention:

If the dolly has a heavy load and/or is equipped with air tires, two-wheel steering is not to be recommended due to higher static friction, as very large steering forces are necessary.

### Note:

The dolly can be moved with one-wheel steering by taking off a Kombi-Wheel (dovetail-connection). The blue switch must be set at „Steer“ and the one wheel that is used to steer must be disengaged, as with driving on track (bolt on Kombi-Wheel). Please note there is a higher risk of tilting due to the smaller basis (three legs). Use the one-wheel-steering only in studios or at zero wind speed.

### The most important points when operating Crab + Steer:

**Before switching over, the kombi wheels must be in the direction of movement.**

**While switching, the Shiftbox may be supported by lightly moving the steering wheel in a left/right direction.**

**„Steering“ (2 wheels) is only possible from two wheel arms (operating side).**

# Track operation

Thanks to the newly developed Kombi Wheels the Buddy dolly can be changed over from studio floor to track. The Kombi Wheels must be disengaged at the wheel bolt (underneath the wheel arm, track symbol) in order to stop derailing.

If required, 2 additional wheel arms can be disengaged (blue bolt at wheel arm console) by pulling the bolt upwards and turning it by 90°. Thus also the wheel arms can be adjusted to track radius.



## Attention:

**The tracks underneath the dolly must always be laid out horizontally. Tracks and wedges must be secured against slipping.**

**A stable underground and underlay must be ensured. It must be able to carry at least the weight of the complete dolly with accessories and persons (especially with Super Jib operation).**

**Ultimate load of underground and underlay material: min. 2000 kg/m<sup>2</sup>**

### Good underground:

All hard surfaces  
e.g. asphalt (road)

### Bad underground:

All soft surfaces  
e.g. forest floor, sand

## Note:

If the dolly is not moved on the track, all four Kombi Wheels should be locked by arresting the kombi-brakes, for safety reasons (especially when mounting or unmounting accessories).

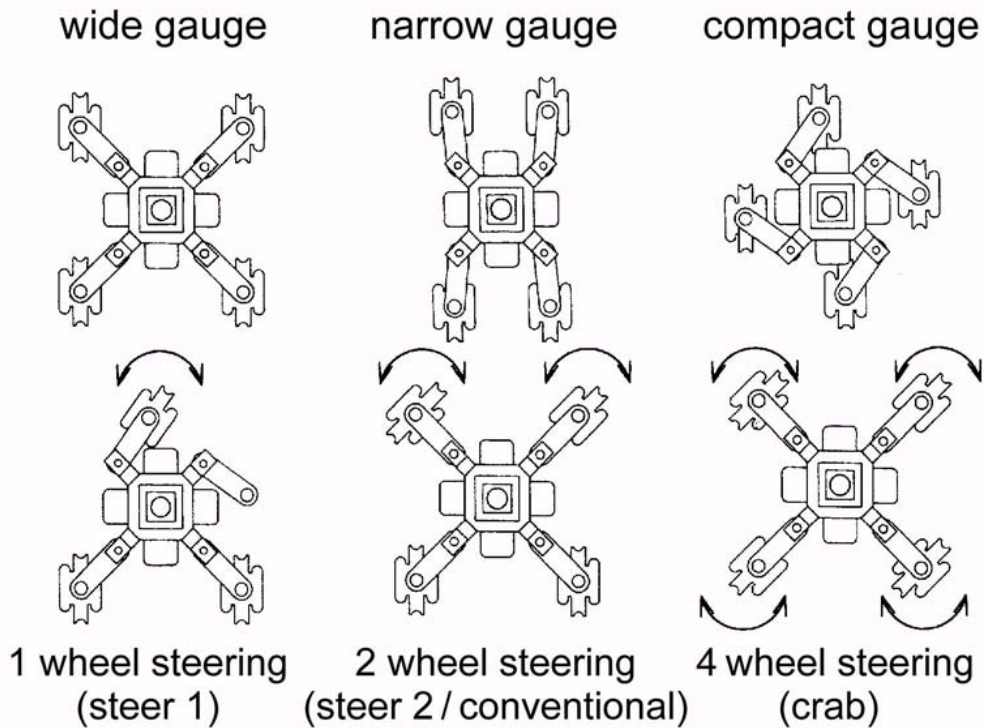
## Major points when using track:

- **There must be enough and stable underground and underlay material.**
- **Adjust wheel arms to wished track gauge.**
- **Disengage Kombi Wheels (esp. on curved tracks).**
- **Lock the wheels when the dolly is not moving**

# Wheel arm

The wheel arms may be set to wide gauge (62 cm) and narrow gauge (36 cm). Pull the blue bolts on the wheel consoles upwards to choose the required gauge. Set the wheel arms to the desired gauge and then let the bolt catch in one of the designated arresting sleeves.

Below are the major wheel configurations:



**Always use wide gauge in connection with jib arms or outriggers. The loading diagram must at all times be observed.**

Use the one-wheel-steering and narrow gauge only in studios or at zero wind speed.

**Wide gauge**



**narrow gauge**



# Combi Wheel



The newly designed Panther Kombi Wheels play a decisive part in improving the dolly's running smoothness both in studios and on track. There are different choices of tyres. The quick-change air tyres are especially suited to operate the dolly on uneven ground (streets etc.). There are two options available for studio wheels (see tyre chart), depending on the resp. loading.

## Exchanging studio wheels with air tyres:

Lift the Dolly at the wheel arm where you want to change the wheels. By loosening the wheel locking screw both studio wheels and air tyres can be exchanged. After the wheel locking screw have been tightened again, put the dolly down and proceed in the same way with the remaining 3 kombi wheels.

## **Tyre Chart** **Studio Wheels**

<p><b>Studio wheel, hard</b> (black), recommended for loads up to <b>600 kg</b> (1300 lbs) total. <b>Studio wheel, soft</b> (white), recommended for loads up to <b>350 kg</b> (770 lbs) total.</p>
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## **Track wheels**

<p><b>Track wheel, VK92</b>, recommended for loads up to <b>600 kg</b> (1300 lbs) total.</p>
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## **Note:**

The dolly's unladen weight of approx. 50 kg (110 lbs) (depending on accessories) is included in the above figures.

# Load chart

Following loading chart may not be exceeded.

The listed values relate to the tilting moment of the dolly in wide gauge without counterweights.

Dynamic forces (accelerating/braking the dolly) were not considered.

<b>Outreach</b>	10 cm	20 cm	30 cm	40 cm	50 cm	60 cm	70 cm
<b>Load</b>	250 kg (550lbs)	250 kg (550lbs)	240 kg (525lbs)	220 kg (485lbs)	200 kg (440lbs)	150 kg (330lbs)	120 kg (265lbs)
<b>Outreach</b>	80 cm	90 cm	100 cm	110 cm	120 cm	130 cm	140 cm
<b>Load</b>	90 kg (198lbs)	70 kg (154lbs)	55 kg (120lbs)	45 kg (99lbs)	35 kg (77lbs)	30 kg (66lbs)	25 kg (55lbs)

When using the Dolly with jibs (e.g. U-Bangi II), wide gauge must be used due to stability reasons. The loading chart must be adhered to in all circumstances.

## **Maximal centric load on Dolly: 250 kg (550 lbs)**

In order to increase stability, the counterbalance rod (No. 100503) may be mounted on the opposite side to the column load, together with the appropriate number of counterweights. In this case, the outrigger may not be turned.



# Accessories

Various accessories from Panther accessory range like Vario Jib, platforms, etc. can be mounted on the Buddy dolly. Please refer to its corresponding operational manuals.



# Maintenance

In order to reach a **high life expectancy and constant quality**, the instructed service intervals must be observed. Warranty claims will only be accepted if the servicing intervals have been observed.

Servicing may only be effected by trained personnel that knows the Buddy Dolly's mechanics. The Dolly is mostly service-free and works reliably.

The components relevant to safety and functioning should be checked every 4years by a well informed person and at least once a year by a responsible person according to ZH 1/222 3.2 or UVV VBG 70 § 34.  
If necessary, components must be changed.

# Technical Data

## Measurements:

Length:	84 cm (33'')
Width: min.	53.5 cm (21'')/max. 82.5 cm (32.5'')
Track gauge:	narrow gauge/wide gauge 36 cm (14'') / 62 cm (24.5'')
Wheel base:	75 cm (29.5'')/62 cm (24.5'')
Floor distance:	5,5 cm (2'')
Payload capacity:	250 kg (550 lbs)