# **PIXY CRANE SYSTEM**



Manual PIXY | E | 02.2008

# MANUAL



<b>1.</b>	Introduction	1
2.	To the grip	1
3∙	safety instructions	2
4.	Advice regarding the payload:	4
5.	Scope of delivery	5
6.	Check-List for assemby	10
<b>7</b> .	Assembly instruction	11
•	7.1 preparation	11
	7.2 Installation instructions version 1 (Jib Arm)	
	7.3 Installation instructions versions 2-7	16
	7.1 preparation	30
8.	Putting into operation	30
	8.1 Loading of the weight bar	30
	Q a Procise adjustment	20
	8.3 Protection of cables	31
	8.4 Adjustment of the remote mount	31
9.	Hand-operated camera	32
	9.1 Parallel drive of the camera	32
	9.1 Tilt movement of the camera	32
10.	Remote Head operation	33
<u>11.</u>	special accessories	34
12.	transportation	35
13.	Service and Maintenance	36
14.	Warranty	37
<u> </u>	GS - Zertificat	38
16.	Inspection Book	39
	16.1 EU - Declaration of Conformity	
	16.2 Repeated Check Up	40
	16.3 Maintenance Booklet	41



#### 1. Introduction

Congratulations to your decision to buy or rent a PANTHER PIXY Crane System. We are very pleased that you have chosen our product, which combines state-of-the-art technology.

High-quality material and sound know-how, as well as a clever concept enable your PANTHER PIXY Crane System to do a professional job, which you will really enjoy when doing your responsible work at the set.

Your new PANTHER PIXY Crane System is a high-quality tool, which enables the creative camera man to do an excellent job – fast and easy – with fantastic shots and camera moves.

The PANTHER PIXY Crane System is a product that has been created and built by experts for experts – to satisfy the high demands of every camera man.

We hope that you will have a lot of pleasure with your PANTHER PIXY Crane System. In order to guarantee the highest security and reliability in our product at the set, please study our operating manual very carefully!

All the best PANTHER GmbH

# 2. To the grip

Sloppy assembly, disassembly and operating have created and will also create in future dam-ages and physical injury, as well as death of involved or even uninvolved persons.

The following operating instructions should explain to the grip how to work with the camera crane and should also make aware and give advice to take care of possible dangers.

Accidents can only be avoided if the dangers are well known and the common sense is activated.



# 3. safety instructions



#### **WARNING!**

Only competent persons are allowed to work with the PANTHER PIXY Crane system.

PANTHER GmbH offers training work shops which will enable the participants to work with the PANTHER PIXY Crane system. The participants will receive a certificate at the end of this seminar. For more information regarding the actual dates or to book, please contact +49 (89) 613 900 01.

Please start working with the crane only after studying the complete instruction manual and understanding everything.

Security advice, measurement and weight indications, as well as the repair and maintenance instructions have to be observed carefully.

The crane may not be operated if there is the danger of being struck by lightning. After shooting the crane has to be dismantled or secured against wind.

Pleaseobserve DIN 15019 part 1/6.1.3. to have enough time to dismantle the crane if a storm comes up. Do not use the crane in the vicinity of high-tension lines.

In case the crane is used on elevated areas (e.g. bridges, sky scrapers) it is recommended to additionally secure the persons on the platform by a security rope at a second object (e.g. concrete post) in order to lower the risk of falling.



#### **CAUTION!**

Using the PIXY Crane System is not allowed if the wind speed exceeds 3.6 km/h. Please observe DIN 15019 to have enough time to dismantle the crane if a storm comes up.

Lifting, swivel and operating range of the crane including the complete outrigger must be kept free. Please look out for possible pinching dangers during assembly and operation.



#### **CAUTION!**

The operation across persons is NOT permitted! The safety distance of 0.5 m / 2' to all persons and parts of the surrounding has to be kept free from all sides.

The camera and the remote head have to be secured additionally at the remote head mount of the crane by means of a safety rope. They can fall off and injure persons.

The crane operator is obliged to make sure that no loose parts are left on the remote head mount.





#### **WARNING!**

It is not allowed to use the crane on inclined planes. The crane has to be secured so that is cannot slip away. The underground has to be hard and inflexible. The minimum carrying capacity of the underground has to be 1200 kg / m².

Please do not exceed the maximum payload of the remote head mount. Please only use the maximum number of counterweights allowed which fit on the weight rod. Only use original PANTHER counterweights. (see PANTHER Broadcast catalog page 12)



#### **CAUTION!**

The use of additional weights, such as sand bags, is not allowed!

For the payload of the base, tracks or supports the complete crane weight including all accessories and persons has to be considered.

Support material such as wedges and blocks have to be fixed in a way that they cannot slip away, fall out or be pushed away.

At the end of the tracks clips or similar safety stops have to be fixed to avoid that the crane could fall down.

Repairs should only be carried out by the manufacturer or persons, who received a special training. PAN-THER GmbH offers service seminars, which can be held according to your desires. Should you be interested, please contact +49 (89) 613 900 30 (PANTHER-Service).

The crane should never be left unattended in assembled state. It has to be secured that persons without authorization cannot use the crane. If necessary adequate measures against heavy wind or storm have to be taken.

Before starting operation the crane's stability with the maximum tilting moment has to be checked.

When working in the studio or with tracks it has to be observed that no hard or loose parts can get under the wheels. Also slight unevenness can endanger standing—and driving security.

Only use the PIXY Crane system with the PANTHER PIXY tripod (code no. 138892). Do only use original PANTHER accessories and spare parts. It is not allowed to drive with the completely mounted PIXY Crane system using air tires.



# 4. Advice regarding the payload:

The payload of the remote head mount is the accumulated weight of all devices (such as remote head, camera, lens, ...) mounted at the remote head mount.

The PANTHER PIXY Crane system may only be assembled according to the assembling versions shown in this operating manual. Other kinds of assembly are not permitted! (see Quick Information)

When turning and rotating the crane outrigger and during curve drives, centrifugal forces can appear which can endanger the standing stability when added.

For safety reasons it is obligatory that the crane stands/drives on absolutely hard, stable and inflexible ground, which is completely leveled. Please pay attention that no hard or loose objects can get under the wheels, so that the standing and driving stability of the crane could be endangered. Example: Cable in the studio. This also applies when working with tracks.

Please check the function, damages and missing parts of the crane every day. Damaged or missing components have to be replaced by new ones immediately.

Mark the operating range (pan and tilt area) of the crane with flags, stickers or similar material. Keep all persons out of the operating area in order to avoid anybody to be hurt by the base dolly or the outrigger.



#### **CAUTION!**

Mounting and dismounting the camera with or without remote system is only allowed with the crane operator's approval. A one-sided removal of weights of a balanced crane will cause a sudden rise of the outrigger and may lead to damages of the crane and possibly severe injuries.

Take care that the outrigger does not touch anything within the rotating area. Check the surrounding of the crane for possible dangers.

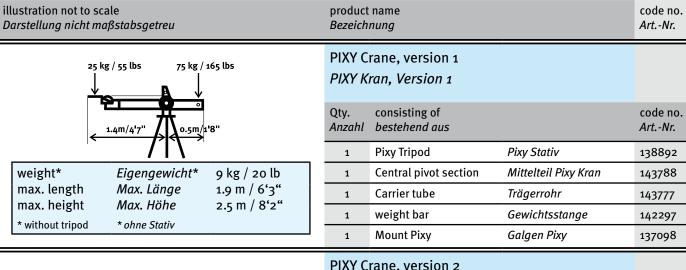
Stop working with the crane immediately, even if only a small part is damaged or not mounted the correct way.

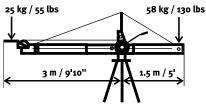


# 5. Scope of delivery

The PIXY Crane System has been conceived for individual adjusting to the respective purpose and requirement. Thanks to a large number of singular components there are nearly unlimited possibilities of combinations and it is possible to assemble the system for almost every application.

Following versions are available in packages and they cover the most frequent requirements. Furthermore, individual assembly of components is possible.



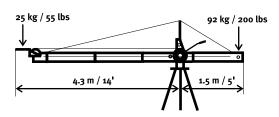


weight* max. length max. height	Eigengewicht*	16 kg / 35 lb
max. length	Max. Länge	4.5 m / 14'9"
max. height	Max. Höhe	4 m / 13'1"
* without tripod	* ohne Stativ	

	(Y Kran, Version 2				
Qty. <i>Anzahl</i>	consisting of bestehend aus		code no. ArtNr.		
1	Pixy Tripod	Pixy Stativ	138892		
1	Central pivot section	Mittelteil Pixy Kran	143788		
1	lifting rod Pixy	Hebelstange Pixy	137363		
1	carrier tube	Trägerrohr	143777		
1	rear tube	Endrohr	137097		
1	weight bar	Gewichtsstange	142297		
1	extension tube	Verlängerung	137096		
1	Mount Pixy	Galgen Pixy	137098		
1	base bracing	Basisabspannung	137106		
1	Balance rod 1.6 m / 5'3"	Parallelogramm 1,6 m	142404		



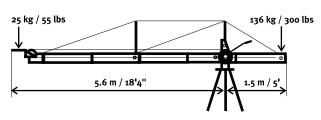
# illustration not to scale product name code no. Darstellung nicht maßstabsgetreu Bezeichnung Art.-Nr.



weight*	Eigengewicht*	18 kg / 40 lb
max. length	Max. Länge	5.8 m / 19'
max. height	Max. Höhe	5 m / 16'5"
* without tripod	* ohne Stativ	

# PIXY crane, version 3 PIXY Kran, Version 3

Qty. Anzahl	consisting of bestehend aus		code no. ArtNr.
1	Pixy Tripod	Pixy Stativ	138892
1	Central pivot section	Mittelteil Pixy Kran	143788
1	lifting rod Pixy	Hebelstange Pixy	137363
1	carrier tube	Trägerrohr	143777
1	rear tube	Endrohr	137097
1	weight bar	Gewichtsstange	142297
2	extension tube	Verlängerung	137096
1	Mount Pixy	Galgen Pixy	137098
1	base bracing	Basisabspannung	137106
1	Bracing ext. for V <sub>3</sub> / <sub>5</sub> / <sub>7</sub>	Abspannungsverl.für V3/5/7	157242
1	Balance rod 1.6 m / 5'3"	Parallelogramm 1,6 m	142404
1	Balance rod 1.3 m / 4'3"	Parallelogramm 1,3 m	142405

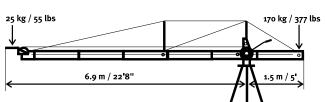


weight*	Eigengewicht*	22 kg / 49 lb
max. length	Max. Länge	7.1 m / 23'8"
max. height	Max. Höhe	6 m / 19'8"
* without tripod	* ohne Stativ	

# PIXY crane, version 4 PIXY Kran, Version 4

1 Pixy Tripod Pixy Stativ 138892  1 Central pivot section Mittelteil Pixy Kran 143788  1 lifting rod Pixy Hebelstange Pixy 137363  1 carrier tube Trägerrohr 143777  1 rear tube Endrohr 137097  1 weight bar Gewichtsstange 142297  2 extension tube Verlängerung 137096  1 ext. tube for bracing Verl. für Abstützung 137342  1 Mount Pixy Galgen Pixy 137098  1 base bracing Basisabspannung 137106  1 Bracing ext. for V3/5/7 Abspannungsverl.für V3/5/7 157242  1 Bracing cable V4 Abspannung V4 138383  1 Balance rod 1.6 m / 5'3" Parallelogramm 1,6 m 142404  2 Balance rod 1.3 m / 4'3" Parallelogramm 1,3 m 142405	Qty. Anzahl	consisting of bestehend aus		code no. ArtNr.
1 lifting rod Pixy Hebelstange Pixy 137363  1 carrier tube Trägerrohr 143777  1 rear tube Endrohr 137097  1 weight bar Gewichtsstange 142297  2 extension tube Verlängerung 137096  1 ext. tube for bracing Verl. für Abstützung 137342  1 Mount Pixy Galgen Pixy 137098  1 base bracing Basisabspannung 137106  1 Bracing ext. for V3/5/7 Abspannungsverl.für V3/5/7 157242  1 Bracing cable V4 Abspannung V4 138383  1 Balance rod 1.6 m / 5'3" Parallelogramm 1,6 m 142404	1	Pixy Tripod	Pixy Stativ	138892
1 carrier tube Trägerrohr 143777  1 rear tube Endrohr 137097  1 weight bar Gewichtsstange 142297  2 extension tube Verlängerung 137096  1 ext. tube for bracing Verl. für Abstützung 137342  1 Mount Pixy Galgen Pixy 137098  1 base bracing Basisabspannung 137106  1 Bracing ext. for V3/5/7 Abspannungsverl.für V3/5/7 157242  1 Bracing cable V4 Abspannung V4 138383  1 Balance rod 1.6 m / 5'3" Parallelogramm 1,6 m 142404	1	Central pivot section	Mittelteil Pixy Kran	143788
1 rear tube Endrohr 137097  1 weight bar Gewichtsstange 142297  2 extension tube Verlängerung 137096  1 ext. tube for bracing Verl. für Abstützung 137342  1 Mount Pixy Galgen Pixy 137098  1 base bracing Basisabspannung 137106  1 Bracing ext. for V3/5/7 Abspannungsverl.für V3/5/7 157242  1 Bracing cable V4 Abspannung V4 138383  1 Balance rod 1.6 m / 5'3" Parallelogramm 1,6 m 142404	1	lifting rod Pixy	Hebelstange Pixy	137363
weight bar Gewichtsstange 142297 extension tube Verlängerung 137096  ext. tube for bracing Verl. für Abstützung 137342  Mount Pixy Galgen Pixy 137098 base bracing Basisabspannung 137106 Bracing ext. for V3/5/7 Abspannungsverl.für V3/5/7 157242 Bracing cable V4 Abspannung V4 138383 Balance rod 1.6 m / 5'3" Parallelogramm 1,6 m 142404	1	carrier tube	Trägerrohr	143777
2 extension tube Verlängerung 137096  1 ext. tube for bracing Verl. für Abstützung 137342  1 Mount Pixy Galgen Pixy 137098  1 base bracing Basisabspannung 137106  1 Bracing ext. for V3/5/7 Abspannungsverl.für V3/5/7 157242  1 Bracing cable V4 Abspannung V4 138383  1 Balance rod 1.6 m / 5'3" Parallelogramm 1,6 m 142404	1	rear tube	Endrohr	137097
1 ext. tube for bracing Verl. für Abstützung 137342  1 Mount Pixy Galgen Pixy 137098  1 base bracing Basisabspannung 137106  1 Bracing ext. for V3/5/7 Abspannungsverl. für V3/5/7 157242  1 Bracing cable V4 Abspannung V4 138383  1 Balance rod 1.6 m / 5'3" Parallelogramm 1,6 m 142404	1	weight bar	Gewichtsstange	142297
1 Mount Pixy Galgen Pixy 137098 1 base bracing Basisabspannung 137106 1 Bracing ext. for V3/5/7 Abspannungsverl.für V3/5/7 157242 1 Bracing cable V4 Abspannung V4 138383 1 Balance rod 1.6 m / 5'3" Parallelogramm 1,6 m 142404	2	extension tube	Verlängerung	137096
1 base bracing Basisabspannung 137106  1 Bracing ext. for V3/5/7 Abspannungsverl.für V3/5/7 157242  1 Bracing cable V4 Abspannung V4 138383  1 Balance rod 1.6 m / 5'3" Parallelogramm 1,6 m 142404	1	ext. tube for bracing	Verl. für Abstützung	137342
1       Bracing ext. for V3/5/7       Abspannungsverl.für V3/5/7       157242         1       Bracing cable V4       Abspannung V4       138383         1       Balance rod 1.6 m / 5'3"       Parallelogramm 1,6 m       142404	1	Mount Pixy	Galgen Pixy	137098
1         Bracing cable V4         Abspannung V4         138383           1         Balance rod 1.6 m / 5'3"         Parallelogramm 1,6 m         142404	1	base bracing	Basisabspannung	137106
1 Balance rod 1.6 m / 5'3" Parallelogramm 1,6 m 142404	1	Bracing ext. for V3/5/7	Abspannungsverl.für V3/5/7	157242
	1	Bracing cable V4	Abspannung V4	138383
2 Balance rod 1.3 m / 4'3" Parallelogramm 1,3 m 142405	1	Balance rod 1.6 m / 5'3"	Parallelogramm 1,6 m	142404
	2	Balance rod 1.3 m / 4'3"	Parallelogramm 1,3 m	142405
1 Balance rod support <i>Parallelogrammstütze</i> 142406	1	Balance rod support	Parallelogrammstütze	142406

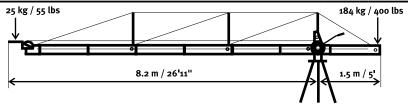




weight*	Eigengewicht*	25 kg / 55 lb
max. length	Max. Länge	8.4 m / 27'7"
max. height	Max. Höhe	7 m / 23'
* without tripod	* ohne Stativ	

# PIXY crane, version 5 PIXY Kran, Version 5

Qty. Anzahl	consisting of bestehend aus		code no. ArtNr.
1	Pixy Tripod	Pixy Stativ	138892
1	Central pivot section	Mittelteil Pixy Kran	143788
1	lifting rod Pixy	Hebelstange Pixy	137363
1	carrier tube	Trägerrohr	143777
1	rear tube	Endrohr	137097
1	weight bar	Gewichtsstange	142297
3	extension tube	Verlängerung	137096
1	ext. tube for bracing	Verl. für Abstützung	137342
1	Mount Pixy	Galgen Pixy	137098
1	base bracing	Basisabspannung	137106
1	Bracing ext. for V <sub>3</sub> / <sub>5</sub> / <sub>7</sub>	Abspannungsverl.für V3/5/7	157242
1	Bracing cable V4	Abspannung V4	138383
1	Balance rod 1.6 m / 5'3"	Parallelogramm 1,6 m	142404
3	Balance rod 1.3 m / 4'3"	Parallelogramm 1,3 m	142405
1	Balance rod support	Parallelogrammstütze	142406

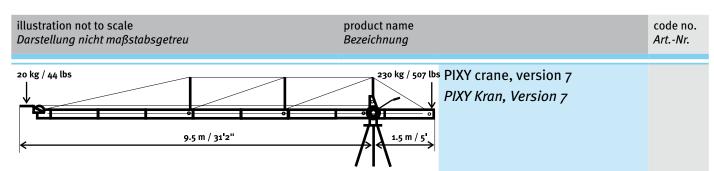


PIXY crane, version 6
PIXY Kran, Version 6

weight* max. length max. height	Eigengewicht* Max. Länge	29 kg / 64 lb 9.7 m / 31'10"
max. height	Max. Höhe	8 m / 26'3"
* without tripod	* ohne Stativ	

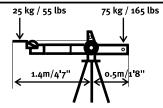
Qty. Anzahl	consisting of bestehend aus		code no. ArtNr.
1	Pixy Tripod	Pixy Stativ	138892
1	Central pivot section	Mittelteil Pixy Kran	143788
1	lifting rod Pixy	Hebelstange Pixy	137363
1	carrier tube	Trägerrohr	143777
1	rear tube	Endrohr	137097
1	weight bar	Gewichtsstange	142297
3	extension tube	Verlängerung	137096
2	ext. tube for bracing	Verl. für Abstützung	137342
1	Mount Pixy	Galgen Pixy	137098
1	base bracing	Basisabspannung	137106
1	Bracing ext. for V3/5/7	Abspannungsverl.für V3/5/7	157242
1	Bracing cable V4	Abspannung V4	138383
1	Bracing cable V6	Abspannung V6	138397
1	Balance rod 1.6 m / 5'3"	Parallelogramm 1,6 m	142404
4	Balance rod 1.3 m / 4'3"	Parallelogramm 1,3 m	142405
2	Balance rod support	Parallelogrammstütze	142406





weight*	Eigengewicht*	31 kg / 69 lb
max. length max. height	Max. Länge	11 m / 36 <b>'</b> 1"
max. height	Max. Höhe	9 m / 29'6"
* without tripod	* ohne Stativ	

-	Qty. Anzahl	consisting of bestehend aus		code no. ArtNr.
	1	Pixy Tripod	Pixy Stativ	138892
	1	Central pivot section	Mittelteil Pixy Kran	143788
	1	lifting rod Pixy	Hebelstange Pixy	137363
Ī	1	carrier tube	Trägerrohr	143777
	1	rear tube	Endrohr	137097
Ī	1	weight bar	Gewichtsstange	142297
	4	extension tube	Verlängerung	137096
Ī	2	ext. tube for bracing	Verl. für Abstützung	137342
	1	Mount Pixy	Galgen Pixy	137098
	1	base bracing	Basisabspannung	137106
	1	Bracing ext. for V3/5/7	Abspannungsverl.für V3/5/7	157242
	1	Bracing cable V4	Abspannung V4	138383
Ī	1	Bracing cable V6	Abspannung V6	138397
	1	Balance rod 1.6 m / 5'3"	Parallelogramm 1,6 m	142404
	5	Balance rod 1.3 m / 4'3"	Parallelogramm 1,3 m	142405
	2	Balance rod support	Parallelogrammstütze	142406

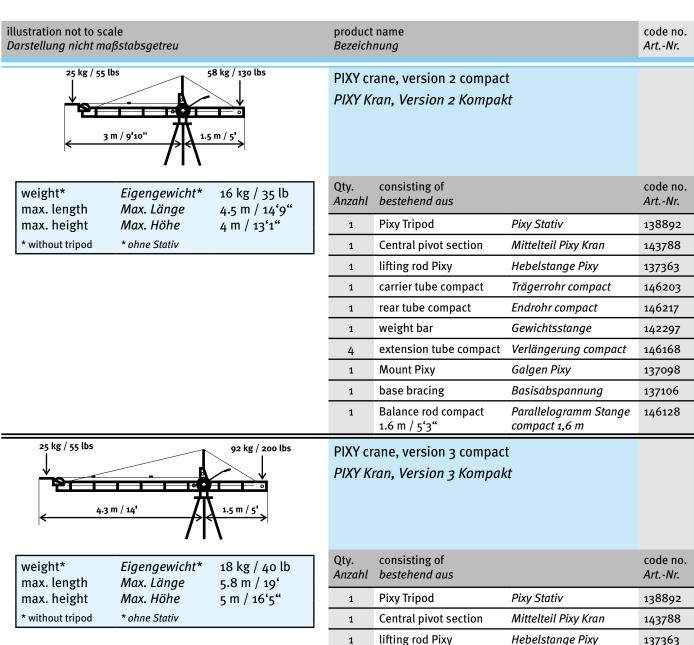


PIXY crane, version 1 compact PIXY Kran, Version 1 Kompakt

weight* max. length max. height	Eigengewicht* Max. Länge	9 kg / 20 lb 1.9 m / 6'3"
max. height	Max. Höhe	2.5 m / 8'2"
* without tripod	* ohne Stativ	

Qty. Anzahl	consisting of bestehend aus	code no. ArtNr.	
1	Pixy Tripod	Pixy Stativ	138892
1	Central pivot section	Mittelteil Pixy Kran	143788
1	carrier tube compact	Trägerrohr compact	146203
1	Extension tube Pixy compact	Verlängerungsrohr Pixy Compact	146168
1	weight bar	Gewichtsstange	142297
1	Mount Pixy	Galgen Pixy	137098





Qty. Anzahl			code no.  ArtNr.
1	Pixy Tripod	Pixy Stativ	138892
1	Central pivot section	Mittelteil Pixy Kran	143788
1	lifting rod Pixy	Hebelstange Pixy	137363
1	carrier tube compact	Trägerrohr compact	146203
1	rear tube compact	Endrohr compact	146217
1	weight bar	Gewichtsstange	142297
6	extension tube compact	Verlängerung compact	146168
1	Mount Pixy	Galgen Pixy	137098
1	base bracing	Basisabspannung	137106
1	Bracing extension for V <sub>3</sub> / <sub>5</sub> / <sub>7</sub>	Abspannungs- verlängerung für V3/5/7	157242
1	Balance rod compact 1.6 m / 5'3"	Parallelogramm Stange compact 1,6 m	146128
1	Balance rod compact 1.3 m / 4'3"	Parallelogramm compact 1,3 m	146205



# 6. Check-List for assemby

Please check which konfiguration is best for your shooting.

The following criteria have to be considered:

•	h	ei	σ	n	t
-		CI	5		ι

- working distance
- spatial limits

- limits in weight
- payload required
- access to shooting place

Take your time to securely assemble, to check and to test the system before use.

1. Transport	Do not expose the outriggers and rods to heavy strokes, do not bend ropes.
2. Auxiliaries	Water level Support device (e.g. small ladder, tripod, etc.)
3. Ground	No slope: check with water level  Use sub-base in case of a slope  if the ground can only be loaded up to 1200 kg/ m² the load has to be distributed by a reasonable sub-base.
4. Basis	no slope: check with water level min. 1200 kg/ m² load capacity of sub-base
5. Assembly	Check whether all necessary parts are available Assemble according to instruction Observe safety instructions



#### **CAUTION!**

Outtrigger have to be supported under the load center of gravity if the outrigger is loaded in only one direction. It is obligatory to observe the safety instructions of the operating manual.



# 7. Assembly instruction

## 7.1 preparation

#### a) Ground

Control if the underground is uneven. In case of more than 1% slope, a special base or tracks have to be used. In case the PIXY is mounted onto a tripod, the legs have to be leveled.



#### **WARNING!**

Load-carrying capacity of the underground min. 1200 kg / m<sup>2</sup>

#### b) Base

The base has to be mounted very carefully and without any slope. Please pay special attention to any loose support material (e.g. wedges) —make sure it can neither slip away nor be displaced by mistake.



#### **WARNING!**

Load-carrying capacity of the base min. 1200 kg / m<sup>2</sup>

## c) on tracks

Note the user manual of the Track system. Only use original PANTHER track systems.

Activate the dolly's brakes so that it cannot roll away during assembly.

If the dolly does not have brakes, mount universal clamps to the track in order to prevent the dolly from moving.



#### **WARNING!**

no track moving with slope.





# 7.2 Installation instructions version 1 (Jib Arm)

#### Step 1 – Setting-up the tripod

Each tripod leg has to be set up in the same height and then the tripod with tense distance wires has to be erected steady on the plane ground. An uneven floor can be levelled by turning the levelling sleeves.

Components needed:

1 x PIXY Tripod

138892



#### Step 2 - Setting-on the central section

Put the central pivot section on the tripod and screw it tight. Check once more that the central section is really in horizontal position.

Components needed:

1 x Central pivot section PIXY

143788



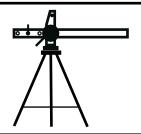


#### Step 3 – Hanging-up the carrier tube

Hang up the carrier tube on the central section, put the binder screw by hand through the hole intended for the version 1 and screw together.

Components needed:

1 x | Carrier tube PIXY, 150 cm / 4'11" | 143777





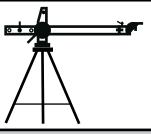


#### Step 4 - Remote mount installation

Put the remote mount on the carrier tube. The retaining eyelets for bracing have to point upwards and sidewards. Here again, make sure that the spring lock is snapped in.

#### Components needed:

1 x Mount PIXY 137098





#### Step 5 a - Hanging-up the balance rod wire

Connect the snap hook on the pulley wire with the remote mount wire. Level the remote mount with turnbuckle.

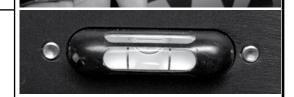


#### NOTE!

The assembly of the lifting rod on the central section is not necessary for the version 1 (Jib Arm).









## Step 5 b - ALTERNATIVELY - assembly of the balance rod tube

The balance rod tubes are available as an option for the PIXY Crane System. They are designated for the firmly locked parallel operation of the crane (e.g. with the Remote Head). The rods make a fixed connection between the central section and the remote mount.

a) Mount the bracket on the remote mount first. Loosen 5 socket screws on the side of the control sheave and mount the bracket there.





b) First of all, scroll down the tensioner pulley in the oblong hole of the central section. Now mount the tubing clamp on the upper end of the oblong hole.

#### **WARNING!**



For the safe operation the tubing clamp has to be screwed carefully on the upper end of the oblong hole in the central section.







c) Now extend the tubing clamp with the balance rod tube up to the remote mount. In order to do so, put the tubes into each other and fix them with quickpins. d) Use the balance rod tube with turnbuckle at its front end. Fix it on the bracket of the remote mount. Level the remote mount with turnbuckle. Components needed: Balance tube kit PIXY version 1 156391 1 X



### 7.3 Installation instructions versions 2-7

Please follow the instructions below to install the PIXY Crane System version 7.



#### NOTE!

Versions 2-6 can be installed in the same way. Just accordingly less number of outriggers and bracing wires shall be installed at the front side (remote mount).

#### Step 1 - Setting-up the tripod

Each tripod leg has to be set up in the same height and then the tripod with tense distance wires has to be erected steady on the plane ground. An uneven floor can be levelled by turning the levelling sleeves.



#### **WARNING!**

Load-carrying capacity of the underground: min. 1200 kg/m², Slope: max. 1%

138892



Components needed:

1 x PIXY Tripod



#### Step 2 - Setting-on the central section

Put the central pivot section on the tripod and screw it tight. The central section can be put in balance precisely with blue levelling sleeves on the tripod.

#### Components needed:

1 x | Central pivot section PIXY | 143788







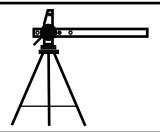
#### Step 3 – Hanging-up the carrier tube

Hang up the carrier tube on the central section, put the binder screw by hand through the hole intended for versions 2 - 7 and screw together.

#### Components needed:

1 x Carrier tube PIXY, 150 cm / 4'11"

143777



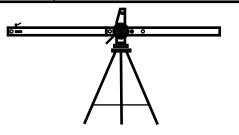


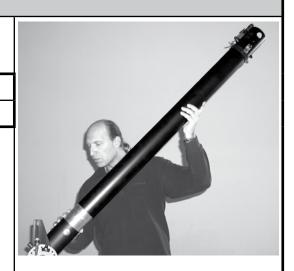
## Step 4 - Putting-in the rear tube

Put in the tube with holes for the counterweight bar as the rear outrigger.

#### Components needed:

1 x Rear tube PIXY, 145 cm / 4'9" 137097



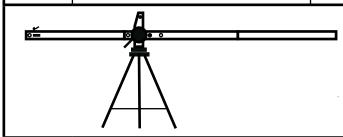


#### **Step 5 – Putting-on the extension tube**

Put the extension tube from the front on the carrier tube. Make sure that the spring lock snaps in right.

#### Components needed:

1 x | Extension tube PIXY, 145 cm / 4'9" | 137096







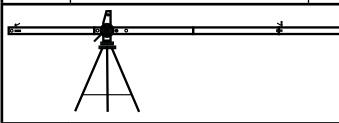
#### Step 6 - Putting-on the extension tube for bracing

Put the extension tube for bracing in front on the extension tube. Make sure that the spring lock snaps in right.

#### Components needed:

1 x Extention tube PIXY, 145 cm / 4'9" for bracing

137342





#### **Step 7 – Putting-on the first upper bracing (Red)**

Put the long bracing rod vertically on the respective stud. Hook up the wires into the eyelets on the rear tube and on the third outrigger and stretch the wires evenly with turnbuckles.



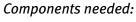
#### **WARNING!**

Always mount the upper bracing first before attaching the side ones.

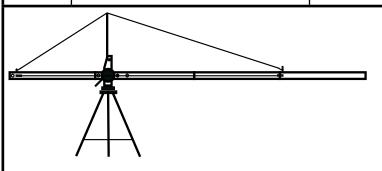


#### NOTE!

Red-marked wires always upwards. Blue-marked wires always sidewards.



1 X Base bracing PIXY (upper wire) 137106









## Step 8 - Putting-on the first side bracing (Blue)

Stick both shorter bracing supports into the respective holes just next to the central section.

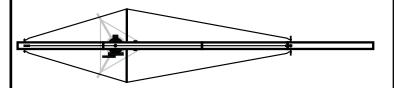
Then hook up the wires into the eyelets placed sideways on the counterweight outrigger and on the outrigger 3 and stretch the wires with turnbuckles.

#### Components needed:

1 x Base bracing PIXY (side wire)

137106

(top view)



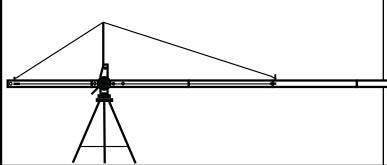


#### Step 9 - Putting-on the extension tube

Put the extension tube from the front on the carrier tube. Make sure that the spring lock snaps in right.

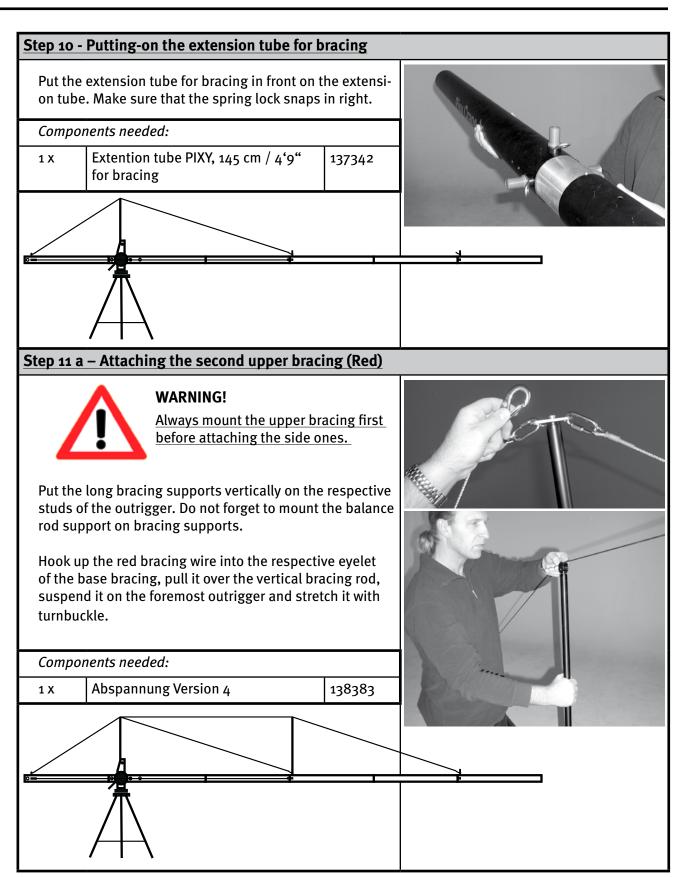
#### Components needed:

1 x | Extension tube PIXY, 145 cm / 4'9" | 137096

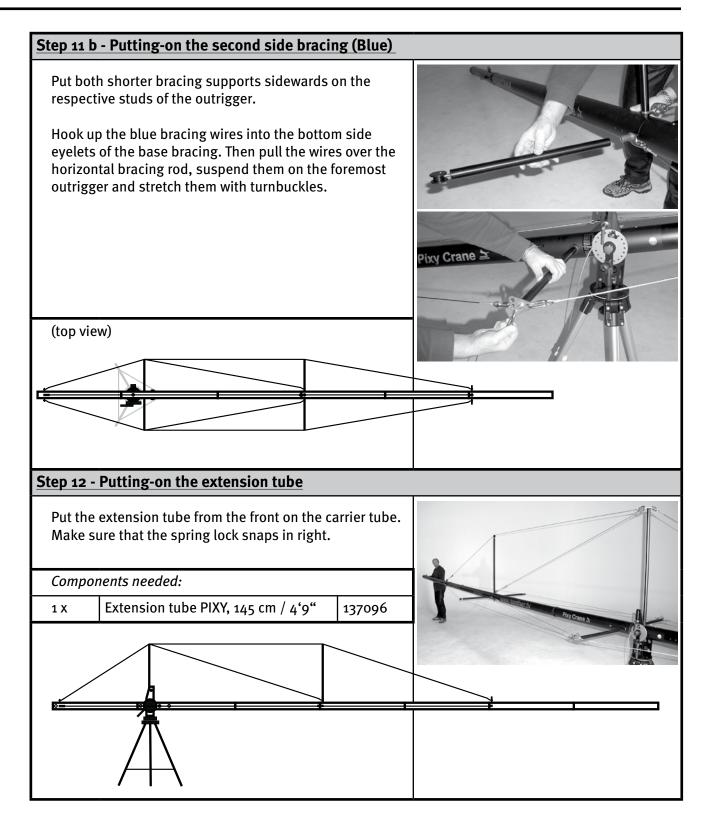














#### Step 13 – Mounting the weight bar

Mount the counterweight bar on the rear outrigger and secure it with split pins to the left and right of the outrigger.

#### Components needed:

1 X Weight bar for 14 weights, Ø 25 mm / 1' 142297



#### Step 14 - Equilibration of the crane

Keep adding counterweight until the crane equilibrates.



4 x | Counterweight PIXY, 17 kg / 37.5 lb | 139692



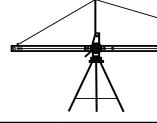
#### Step 15 - Putting-on the extension tube

Put the extension tube from the front on the carrier tube. Make sure that the spring lock snaps in right.

#### Components needed:

1 x | Extension tube PIXY, 145 cm / 4'9" | 137096





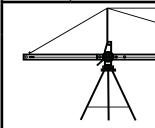
#### **Step 16 - Remote mount installation**

Put the remote mount on the outrigger 7. The retaining eyelets for bracing have to point upwards. Here again, make sure that the spring lock is snapped in.

#### *Components needed:*

1 x Mount PIXY 137098







## Step 17 a - Attaching the third upper bracing (Red)



#### **WARNING!**

Always mount the upper bracing first before attaching the side ones.

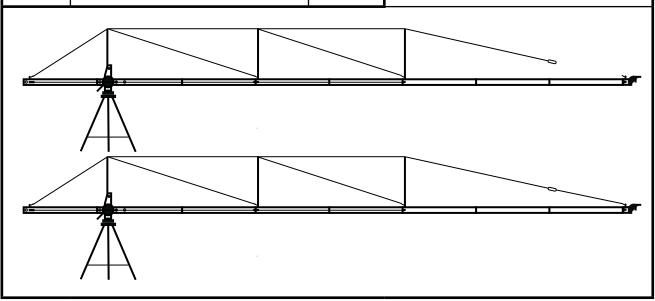
Put the long bracing supports vertically on the respective studs of the outrigger. Do not forget to mount the balance rod support on bracing supports.

Hook up the red bracing wire into the respective eyelet of the base bracing and pull it over the vertical bracing rod. Extend it with the red wire of the bracing extension for versions 3/5/7 and hang it from the front on the remote mount. Stretch the turnbuckle.



#### Components needed:

1 X	Wiring extention PIXY, version 6	138397 142406
1 X	Balance rod PIXY support	142406
1 X	Wiring extention PIXY, version 3/5/7	157242





## Step 17 b - Putting-on the third side bracing (Blue)

Put both shorter bracing supports sidewards on the respective studs of the outrigger.

Hook up the blue bracing wires each into the bottom side eyelets of the base bracing and pull the wires over the horizontal bracing rod.

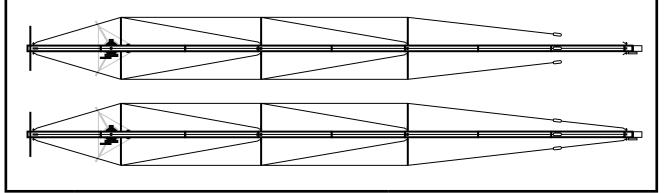
Extend them with the blue wires of the bracing extension for versions 3/5/7 and hang them from the front on the remote mount. Stretch the turnbuckles.

### Components needed:

		138397
1 X	Wiring extention PIXY, version 3/5/7	157242



#### (top view)





#### Step 18 a - Assembly of the balance rod tube

The balance rod tubes are standard part of the PIXY Crane System. They allow dynamic movement of the remote mount in the top as well as bottom view.



#### NOTE!

Early PIXY Cranes have a wire instead of rods. The wire shall be hung between the cable pulley wire and the remote mount wire.

a) Always hang the 1.6 m rod on the wire of the cable pulley first.



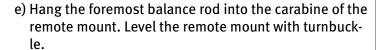
b) Now extend the 1.6 m rod with remaining 1.3 m balance rods up to the remote mount. Hang up the rods on each other and fix them with the safety pins.



c) Mount the balance rod supports for rods on the vertical bracing supports (if not already done).



d) Lead the balance rod tubes through the balance rod supports.











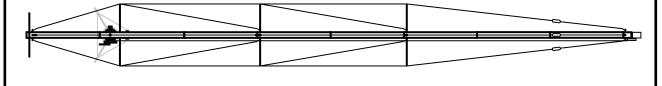
f) Mount the lifting rod on the central section.



Balance rods needed: (per version)

Version:	Qty:	product name:	code no.
Version 1	-	-	-
Version 2	1 X	Balance rod PIXY 1.6 m / 5'3"	142404
Version 3	1 X	Balance rod PIXY 1.6 m / 5'3"	142404
	1 X	Balance rod PIXY 1.3 m / 4'3"	142405
Version 4	1 X	Balance rod PIXY 1.6 m / 5'3"	142404
	2 X	Balance rod PIXY 1.3 m / 4'3"	142405
	1 X	Balance rod PIXY support	142406
Version 5	1 X	Balance rod PIXY 1.6 m / 5'3"	142404
	3 x	Balance rod PIXY 1.3 m / 4'3"	142405
	1 X	Balance rod PIXY support	142406
Version 6	1 X	Balance rod PIXY 1.6 m / 5'3"	142404
	4 X	Balance rod PIXY 1.3 m / 4'3"	142405
	2 X	Balance rod PIXY support	142406
Version 7	1 X	Balance rod PIXY 1.6 m / 5'3"	142404
	5 X	Balance rod PIXY 1.3 m / 4'3"	142405
	2 X	Balance rod PIXY support	142406

(top view)





## Step 18 b - ALTERNATIVELY - Mounting the balance rod tubes

The balance rod tubes are available as an option for the PIXY Crane System. They are designated for the firmly locked parallel operation of the crane (e.g. with the Remote Head). The rods create fixed connection between the central section and the remote mount.



#### NOTE!

The lifting rod on the central section of the PIXY Crane System is useless when using the balance rod tube.

a) Mount the bracket on the remote mount first. Loosen 5 socket screws on the side of the control sheave and mount the bracket there.



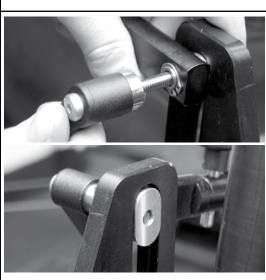


b) Fix the tubing clamp on the central section. Remove the tensioner pulley from the oblong hole first. Now mount the tubing clamp on the upper end of the oblong hole.



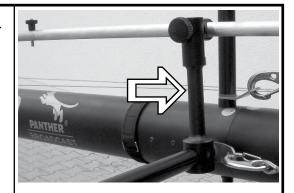
#### **WARNING!**

For safe operation, the tubing clamp has to be screwed carefully on the upper end of the oblong hole in the central section.





c) Mount the balance rod supports for tubes on the vertical bracing supports (if not already done).



d) Now extend the tubing clamp with the balance rod tubes up to the remote mount. Put the tubes into each other and fix them with quickpins.



e) Lead the balance rod tubes through the balance rod supports.



f) Use the balance rod tube with turnbuckle at the front end. Fix it on the bracket of the remote mount. Level the remote mount with turnbuckle.

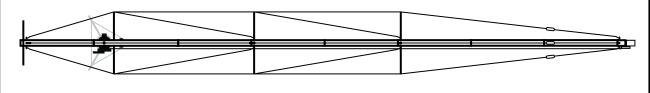




# Balance tubes needed: (per version)

Version:	Qty:	product name:	code no.
Version 1	1 X	Balance tube kit PIXY version 1	156391
Version 2	1 X	Balance tube kit PIXY version 1	156391
	1 X	Balance tube PIXY 1.3 m / 4'3"	156147
Version 3	1 X	Balance tube kit PIXY version 1	156391
	2 X	Balance tube PIXY 1.3 m / 4'3"	156147
Version 4	1 X	Balance tube kit PIXY version 1	156391
	3 X	Balance tube PIXY 1.3 m / 4'3"	156147
	1 X	Balance tube PIXY support	156330
Version 5	1 X	Balance tube kit PIXY version 1	156391
	4 X	Balance tube PIXY 1.3 m / 4'3"	156147
	1 X	PBalance tube PIXY support	156330
Version 6	1 X	Balance tube kit PIXY version 1	156391
	5 X	Balance tube PIXY 1.3 m / 4'3"	156147
	2 X	Balance tube PIXY support	156330
Version 7	1 X	Balance tube kit PIXY version 1	156391
	6 x	Balance tube PIXY 1.3 m / 4'3"	156147
	2 X	Balance tube PIXY support	156330

# (top view)





# 8. Putting into operation



#### **CAUTION!**

Tight fit of all connecting elements (screws, hooks etc.) has to be checked once again before every loading (remote mount, weight bar) and putting into operation. Follow the safety instructions.

Max load capacity:	see Quick Information
Max wind speed:	3,6 km/h
Max driving speed:	o,2m/sec
Max tilt:	3°
Max service weight:	290 kg / 639 lb
Min carrying capacity of the ground:	1200 kg / m²

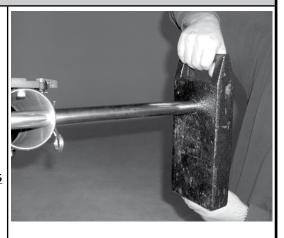
# 8.1 Loading of the weight bar

Open the closing pins and place the weights evenly left and right. Restore the closing pins in their position to assure safe operation.





Do not exceed the maximum payload of the remote mount. Use only the maximum number of counterweights allowed. The use of additional weights (e.g. sand bags) is forbidden!



## **8.2** Precise adjustment

The sliding weight allows an individual and outstanding equilibration of the crane. The sliding weight is enlaced around the tube as a clamp and it can be moved to front or rear according to demand.





## 8.3 Protection of cables

Lead all the necessary cables along the crane up to the central section and secure them with clamping straps placed on the crane.

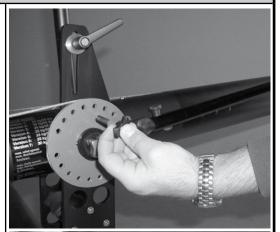


## 8.4 Adjustment of the remote mount

The levelling of the remote mount is done by modification of the balance rod/wire length. For this purpose the lock pin of the cable pulley has to be released and the cable pulley has to be turned adequatly. There are two different fitting holes (covered with the cable pulley) for the lock pin located in the aluminium plate of the central section. Thus, it is possible to achieve interlength and level the remote mount.

The handle shall be put and fastened to the stud of the cable pulley (not for version 1).

Precise adjustment of the remote mount is achieved by screwing the turnbuckle.







## 9. Hand-operated camera

For version 2-7 only: The camera can be inclined by moving the handle. For this purpose the locking bolt needs to be unlocked.



#### **WARNING!**

The heavier the load at the remote head mount (camera) the more force is required to move the handle. Only release the handle if the locking bolt of the rope pulley is locked!

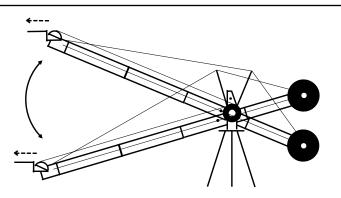
#### 9.1 Parallel drive of the camera

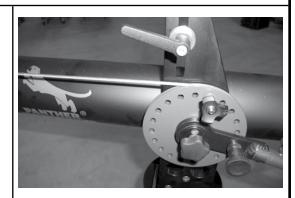
The angle of camera is not changed when moving the crane up or down (e.g. operation with remote head), if the rope of the parallelogram rods is left on the rope pulley.



#### NOTE!

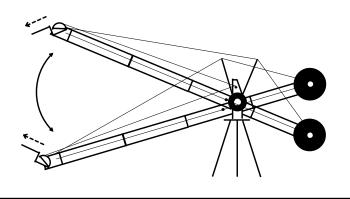
This applikation is equivalent to the funktionality of the optional balance rod tubes (see also step 18 b)

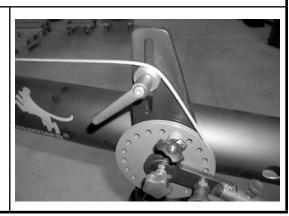




#### 9.1 Tilt movement of the camera

If the rope of the rope pulley is put over the deflection pulley, the inclination angle of the camera is changed when the crane moves up or down. The angle keeps changing with an increasing distance between deflection pulley and rope pulley.







# 10. Remote Head operation

The PIXY Crane System is also designed for remote head operation. For assembling a remote head special adapter needes.

illustration not to scale Darstellung nicht maßstabsgetreu	descripion Bezeichnung	code no. ArtNr.
	PIXY Crane - Optional Accessories Remote H KRANSYSTEM - SONDERZUBEHÖR REMOTE HEA	
	PIXY-Jimmy Jib Adapter PIXY-Jimmy Jib Adapter	155416
	PIXY-Cammate Adapter PIXY-Cammate Adapter	156712
	3/8" Distance bolt for Servo Box 3/8``Distanzbolzen für Servobox	141548
n.a.	PIXY adapter for remote head control Pixa Adapter für Remote Head Steuerung	100020
	Turning lock for Quick Change Rect. Plate AdapterGrub screw DIN 913 M6x8 A2  Verdrehsicherung für Quick Change Rect. Plate AdapterGewindestift DIN 913 M6x8 A2	104110
	Quick Change Rect. Plate Adapter Quick Change Rect. Plate Adapter	M323
•	Distanceadapter for Quick Change Rect. Plate AdapterDistanzschale für Quick Change Rect. Plate Adapter	142295



# 11. special accessories

For the PIXY Crane system are miscellaneous optional accessories available.

illustration not to scale Darstellung nicht maßstabsgetreu	descripion Bezeichnung	code no. ArtNr.
1	adapter for euromount  Adapter für Euromount	139313
	PIXY adapter for Foxy pyramid  PIXY Adapter für Foxy Pyramide	141172
	Monitor holder PIXY  Monitorhalter PIXY	140241
	Rotating plate for camera Kameradrehscheibe	143082



# 12. transportation

The PIXY Crane system is transportable with hard cases or easy soft bags. Both are availabe as normal and extra short "Compact" versions.

illustration not to scale Darstellung nicht maßstabsgetreu	descripion Bezeichnung	code no. ArtNr.	suitable for passend für
	Case for PIXY Crane Version 1-7+Tripod  Koffer für PIXY Crane Version 1-7+Stativ	100584	PIXY Version 1-7
	Case for PIXY Crane Compact Version 1-3+Tripod Koffer für PIXY Crane Compact Version 1-3+Stativ	100586	PIXY Compact Version 1-3
Town Town	Bag for PIXY Crane (2 pcs. = 1 set)  Tasche für PIXY Crane (2St. = 1 Satz)	100585	PIXY Version 1-7
the state of the s	Bag for PIXY Crane compact  Tasche für PIXY Crane compact	100587	PIXY Compact Version 1-3
	Cart for weight box Sackkarre für Gewichtsbox	132330	132332
	Counterweight cart  Gegengewichtswagen	109018	115415 115431 115432 139692



# 13. Service and Maintenance

The PIXY Crane system is a very solid piece of equipment that guarantees reliable work without a lot of maintenance work.

To guarantee a long life and stable quality, it is advisable to treat all elements very carefully.



#### INFO!

For damages occurred due to inappropriate treatment we do not accept any warranty claims.

After working with the system, particularly after working in a dirty, dusty, sandy, wet and salty surrounding, the system has to be cleaned and maintained very carefully. Please keep the suspension cables in good condition.



#### **WARNING!**

Interrupt the work immediately, if only a small part of the system is damaged or missing.

Maintenance and repair should only be made by trained and competent persons. PANTHER GmbH offers service seminars, which will be hold according to your desires. For exact dates, please call +49 (89) 613 900 30 (PANTHER-Service).

According to ZH 1/222 / 3.2 and UVV BGV C1 (former VBG 70), the safety and machine appliances have to undergo an interim check up by a competent person at least every 4 years and at least every year by an expert (repeated check up - see maintenance book).

Please check all cables and turning buckles for damages (e.g.bend cables). If necessary, parts of the crane have to be exchanged.



## 14. Warranty

We warrant that the products are free of manufacturing defects in material. Both for mechanical and for electronic parts, the warranty period is 12 months. The warranty period begins with the date of delivery.

Any warranty shall, however, expire if our operating and maintenance instructions are not complied with, if changes are made to the products, or if parts of our equipment are replaced with parts that do not correspond to the original specifications; the same shall apply to improper handling of the equipment.

The purchaser undertakes to exempt us from any claims for compensation which might arise on the part of third parties vis-à-vis us, whether resulting from putting into service or from using the equipment. The purchaser must inform our costumer service management in writing about any discernible defects without delay – at the latest, however, within one week after receipt of the delivered item. Defects which do not become discernible within this period, even after careful examinations, must be reported to us by the purchaser in writing immediately after discovery.

In the event that the purchaser should report that the products do not correspond to the warranty, we may require at our discretion that either

- a) the defective equipment or the defective part is to be sent to us for repair and subsequent return, or
- b) the purchaser keeps the defective equipment or the defective part available, and we shall commission an expert who will be sent to carry out the repair.

Transport cost and travelling expenses incurred for the purpose of remedying defects shall be borne by the purchaser.

Defects which occur to the equipment as a result of natural wear and tear shall not be covered by the warranty. When asserting claims under warranty, it is the duty of the purchaser to prove that the defects were not caused by circumstances which are among the risks within his sphere of responsibility (such as transport damage, improper operation, etc.).

Any further claims in particular claims for damages for direct or indirect damage are excluded. If after an appropriate time it is not possible to remedy the defect, the purchaser may at his discretion demand a reduction of the payment or cancellation of the contract.

Only the direct purchaser shall be entitled to make warrantly claims against us; such claims are not assignable.

Oberhaching, April 2006



# 15. GS - Zertificat





# 16. Inspection Book

product:	PANTHER PIXY Crane			
manufacturer:	PANTHER Gmb Raiffeisenallee 82041 Oberha			
payload:	version 1-6:		25 kg / 55 lbs	
	version 7:		20 kg / 44 lbs	
year of construction:				
series - no. :				
user:	company:			
	adress:			
	city:			
county:				

# 16.1 EU - Declaration of Conformity

in conformity with the fo	llowing reg	gulations:		
Maschinenrichtlinie		98/37/EG		
Sicherheit von Maschinen		Sicherheit von Maschinen		DIN EN 292-1: 11/1991 DIN EN 292-2: 6/1995
Veranstaltungs-und Produktions-stät- ten für szenische Darstellung		BGV C1 (vorherige VBG 70) April 1998		
The technical documentation is existing completely. The Operating Instruction that belong to the machine is submitted.				
, Juni 30, 2006	Erich Fitz, Managing Director			
	Maschinenrichtlinie  Sicherheit von Maschinen  Veranstaltungs-und Produkt ten für szenische Darstellun  The technical documentation perating Instruction that belon	Sicherheit von Maschinen  Veranstaltungs-und Produktions-stätten für szenische Darstellung  The technical documentation is existing perating Instruction that belong to the modern services and services are services as a service services and services are services as a service are services as a services are services as a services are services as a service are services are services as a service are services		



# 16.2 Repeated Check Up

Ref. safety-related and und maschine-related equipment on stages and in studios. Certification of recurrent inspection according to §34 UVV Veranstaltungs- und Produktionsstätten für szenische Darstellung (VBG 70).

product:	PANTHER PIX	IXY Crane				
manufacturer:	PANTHER Gn Raiffeisenall 82041 Oberh	llee 3				
payload:	version 1-6:			25 kg / 55 lbs	,	
	version 7:			20 kg / 44 lbs	5	
year of construction:						
series - no. :						
user:	company:					
	adress:					
	city:					
	county:					
location of use:						
surveyor:	name:					
	adress:					
	city:					
	county:					
The mentioned product h						
checked by the person lis there are the following de						
there are the following defects.						
trial run varried out (load, speed):						
unhesitating continuous :			yes	5		no
revision necessary:			yes	5		no
place, date			S	sign of well info	ormed person:	



# 16.3 Maintenance Booklet

product:		PANTHER PIXY Crane		
manufacturer:		PANTHER GmbH		
		Raiffeisenallee 3		
		82041 Oberhaching		
paylo	oad:	version 1-6:	25 kg / 55	lbs
		version 7:	20 kg / 44	lbs
year	of construction:			
serie	es - no. :			
	F	OLLOWING MAINTENANCE HAS B	EEN DONE	:::
1.	date:	maintenance requirements:		name:
2.	date:	maintenance requirements:		name:
3.	date:	maintenance requirements:		name:
4.	date:	maintenance requirements:		name:



5.	date:	maintenance requirements:	name:
6.	date:	maintenance requirements:	name:
7.	date:	maintenance requirements:	name:
8.	date:	maintenance requirements:	name:
9.	date:	maintenance requirements:	name:
10.	date:	maintenance requirements:	name:



11.	date:	maintenance requirements:	name:
12.	date:	maintenance requirements:	name:
13.	date:	maintenance requirements:	name:
14.	date:	maintenance requirements:	name:
15.	date:	maintenance requirements:	name:
16.	date:	maintenance requirements:	name: