

WIDEPAN

全景幅 / PRO II 型

PANORAMIC CAMERA

镜头旋转式照相机



使用说明书

USER'S MANUAL

WIDEPAN / PRO II

PANORAMIC CAMERA

全景幅 / PRO II 型

镜头旋转式照相机

(用户手册)

边阅读边操作 便能得心应手

亲爱的用户：

为了能充分有效地发挥 全景幅/PROII 全景照相机的特有性能，掌握正确的使用方法和操作程序，进行适当的维护保养，请您在使用前详细地阅读本说明书，最好能边阅读边模拟操作相机。在完全理解掌握后使用，定能得心应手地进行摄影创作。

本说明书以 全景幅/PROII 全景照相机的基型为范例进行演示。由其派生的变型产品，若外形、性能、规格略有变化，恕不另外通告。

产品执行标准：Q/JG 087-2000

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取景要领与相机安平

1. 取景器特点

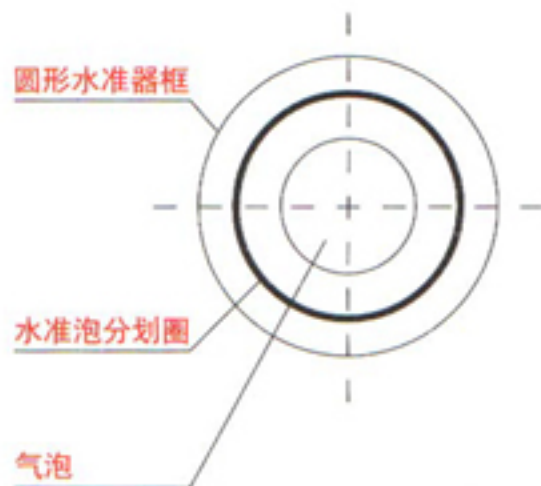
- (1). 超广角取景。横向(宽度方向)取景视场率大于75%。
- (2). 附有相机安平水准器。可分别从取景器上方或通过取景器目镜观察气泡置中情况。
- (3). 可卸式结构。取景器可从插座上卸下，供单独取景使用。
- (4). 透视取景，无近距离拍摄视差自动校正功能。

2. 取景要领

- (1). 取景时眼睛应靠近取景目镜，且应置中。
- (2). 眼睛与取景目镜的间距偏大，会导致取景清晰度下降和取景视场缩小。视力不足者请矫正视力后观察。
- (3). 眼睛偏离取景目镜的中心，会导致取景视场中心和拍摄视场中心偏离。

3. 相机安平

观察水准器中水准泡置中程度。相机沿左右、前后斜倾方向调整，当气泡位于分划区域的中心时，相机即处于水平状态。



使用、擦拭与存放常识

1. 使用宜忌

(1). 相机使用前应详细阅读本说明书，熟悉相机的结构性能和构件的作用特性，掌握规定的使用方法和操作程序。

(2). 操作时应谨慎小心，用力适度。若操作时感到所受阻力剧增，机构很可能出现了故障，此时用力过大、过猛，极易损坏构件。

(3). 应尽量避免在阳光下长时间曝晒和在高温(45℃以上)条件下使用。在低温(-20℃以下)环境中使用时，应尽量使照相机在保温状态下工作。

(4). 温度剧变会使湿气凝结，导致镜头表面产生雾霜和相机内部产生水分。当进入温差悬殊的环境(如严冬之室内外)时，应稍待片刻，使相机适应环境温度后，再从摄影包中取出。

2. 擦拭要领

(1). 相机在海、河、山区、雨、雾、雪天及风沙、粉尘的环境使用后，应及时擦拭、去潮，尤其应将海风、汗水沾污的盐分擦拭干净。

(2). 清除灰尘一般采用清洁的软毛刷掸拂和柔软布擦拭，或者用吹气球吹拂。受光窗内和机身内腔可利用吹气球捏扁后自行复原产生的吸力来吸取灰尘。切不可用嘴吹拂或呵气。

(3). 雨雾潮湿环境或清水擦拭而导致的水分，可将相机置于干燥通风处或用风扇轻轻吹拂的方法去潮，切不可采用太阳或加热烘烤。

3. 存放常识

- (1). 相机存放前应擦拭干净、吹干去潮。
- (2). 准备较长时间不使用时，经上弦的快门必须释放，电池应取出。
- (3). 相机应存放在干燥、清洁、阴凉、通风，且无有害气体侵蚀的场所；存放处应避免受潮、受热、受压；且不宜与易吸附水分的物品(棉、毛织物、书籍等)和易挥发物质(樟脑精、化妆品、药品等)一起存放，以免构件锈蚀失灵、镜片腐蚀长霉。

相机的特殊操作

1. 防重拍操作

本照相机快门上弦机构与卷片机构是相关的。只有卷片完成后，方可使快门上弦。拍摄后快门上弦机构被锁定(此时快门不能上弦)；若要进行下一次拍摄，需先卷片。

2. 多次曝光

- (1). 第一次曝光拍摄后按住多次曝光钮，再次使快门上弦。
- (2). 释放快门按钮完成二次曝光。
- (3). 重复操作1、2可完成多次曝光。

注：进行多次曝光拍摄时，相机必须固定可靠且被拍摄主体不可移动以防止产生叠影。

PRO II 型相机的附件:

1. 135胶卷适配器

本相机除了可用120和220胶卷拍摄50 mm x 110 mm分别拍摄画幅6张和12张以外, 还可以采用135胶卷拍摄, 画幅尺寸为24 mm x 110 mm, 长宽比为1: 4.5, 但此时应选用135专用附件。

135胶卷的安装及拍摄详见相应的附件说明书。

2. 滤色镜

为了适合专业摄影场合的需要, 相机备有专业滤色片附件。
共有十二种规格以整套方式供应。

滤色镜分三类:

1. 黑白摄影用: 红色、绿色、黄色。
2. 色温校正用: 81B、82B、85A、80A
3. 特殊滤镜: 中性灰减光50%滤镜, 荧光校正镜FL

全景型 镜头旋转式照相机景深对应表		镜头焦距 f=50mm						
景深 \ 光圈		F3.8	F4	F5.6	F8	F11	F16	F22
摄影距离								
2.0m		1.69-2.44	1.68-2.46	1.58-2.72	1.45-3.21	1.32-4.16	1.14-8.12	0.98-∞
3.5m		2.66-5.10	2.63-5.22	2.40-6.50	2.11-10.3	1.84-37.6	1.51-∞	1.24-∞
绿点(5m)		3.3-7.7	3.2-8.05	2.85-11.5	2.45-33.0	2.14-∞	1.68-∞	1.38-∞
7.0m		4.30-18.8	4.22-20.6	3.64-∞	3.02-∞	2.49-∞	1.92-∞	1.51-∞
∞		9.13-∞	8.76-∞	6.58-∞	4.80-∞	3.58-∞	2.52-∞	1.66-∞

全景型 镜头旋转式照相机景深对应表		镜头焦距 f=50mm						
景深 \ 光圈		F3.8	F4	F5.6	F8	F11	F16	F22
摄影距离								
7ft		5.88-8.66	5.82-8.76	5.46-9.74	4.99-11.7	4.51-15.66	3.88-35.7	3.33-∞
10ft		7.86-13.75	7.77-14.03	7.13-16.7	6.35-23.5	5.59-47.5	4.66-∞	3.88-∞
15ft		10.7-25.4	10.5-26.4	9.36-37.8	8.06-108.3	7.04-∞	5.51-∞	4.55-∞
25ft		14.8-78.6	14.5-88.6	12.45-∞	10.58-∞	8.40-∞	6.46-∞	5.05-∞
∞		29.9-∞	28.7-∞	21.6-∞	15.7-∞	11.76-∞	8.27-∞	6.10-∞

WIDEPAN / PROII

PANORAMIC CAMERA

(USER'S MANUAL)

Forward

Dear User:

Please familiarize yourselves with this manual to master the operation and care methods . You'd better read and operate simultaneously to get perfect shooting result.

This manual is on a basic of WIDEPAN/PROII T120. The shapes, performance and specifications of this products for improving purpose are subject to change without notice.

Production Standard: Q/JG 087—2000

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Structure and Main Purpose

The lens rotates around the erect axis horizontally, the shutter slot also rotates around the erect axis at the same time, then the picture is taken in the cylinder film through the lens and the shutter slot.

The release power of the clockwork spring drives the lens and the shutter to rotate, then the gear group control exposure time of the film or shutter speed.

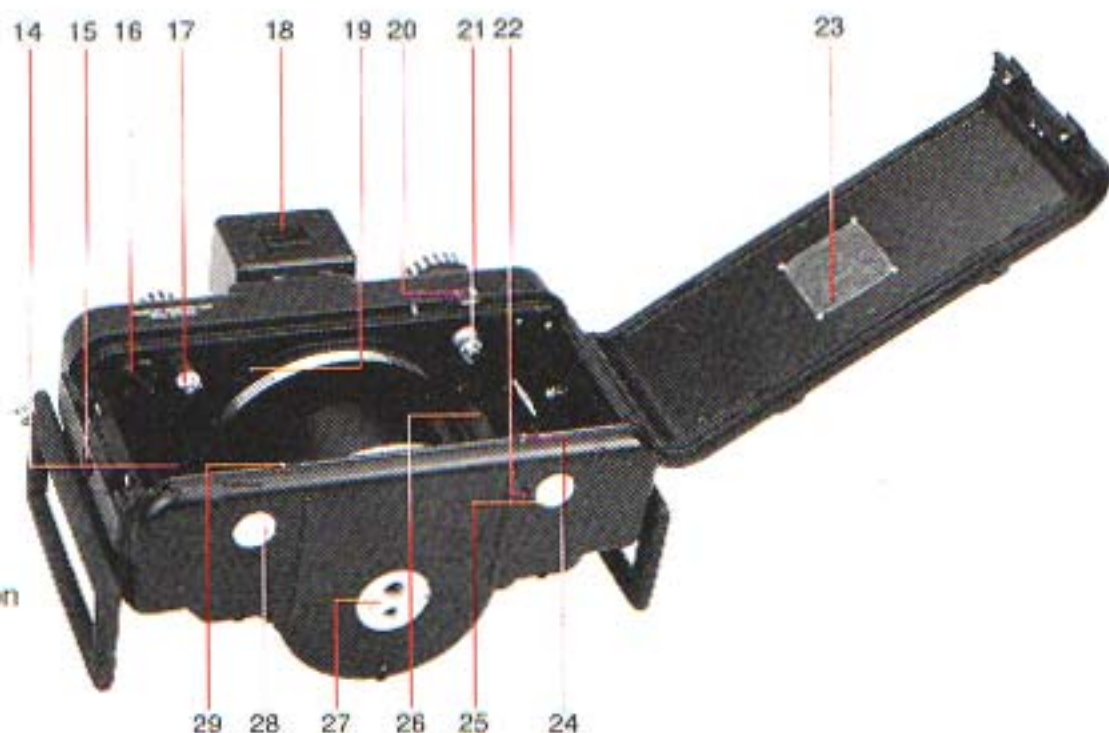
This camera uses the 120 roll film, takes picture by rotating the shutter and the lens, the frame proportion of the width and the length is one to two point two. It is easy to operate this camera, the photos taken by this camera are clear and vivid. It is suitable to take panoramic pictures using this camera, so it is applied widely to scene, news, team photo, also in slot space and special environment.

Description of Parts

1. Shutter Release Button
2. Winding Knob
3. Multi-Exposure Button
4. View Finder
5. Spirit Bubble
6. Shutter Speed Dial
7. Shutter Speed Index/Illumination Button
8. Shutter Cocking Arm
9. Exposure Drum/Camera Lens
10. Adjusting Wheel (Lens Aperture)
11. Adjusting Wheel (Focal Distance)
12. Hand Grip
13. Rewinding Button (For 135 Film Only)



- 14. Film Pilot Roller 1
- 15. Back Cover Opening Knob
- 16. Illuminating Battery Chamber
- 17. Film Feed-in Shaft (Upper)
- 18. Viewfinder Eyepiece
- 19. Film Start Index
- 20. Film Counter
- 21. Film Winding Shaft (Upper)
- 22. Rewinding Release Button
(For 135 Film Only)
- 23. Back Cover
- 24. Film Winding Shaft Take-off Button
- 25. Film Winding Shaft (Down)
- 26. Film Pilot Roller 2
- 27. Tripod Socket
- 28. Film Feed-in Shaft (Down)
- 29. Film Feed-in Shaft Take-off Button



Technical Data and Main Specification

Film: 120, 220, 135 roll film

Angle of View: 140 degree, continues shooting with lens swing

Picture Size: 120 film 50mm x 110mm with 6 exposures each roll

220 film 50mm x 110mm with 12 exposures each roll

135 film 24mm x 110mm with 10 exposures each roll

Lens: Tesser type, 4 elements in 3 groups

Focal Length: f 50mm

Shutter: rotating fixed slit, 3mm

Focal Plane: cylinder shape curved plane

Spirit Bubble Level: round shape, seen inside and above the viewfinder

Aperture: F3.8 — F22 (7 steps, stepless)

Shutter Speed: 1/2s, 1/60s, 1/250s, 3 clicks

Viewfinder: detachable, with 0.4x magnification

Focal Distance: from 2m to infinity

Film Transport: manual

Exposure Counter: additive

Tripod Socket Thread: 1/4" x 1/20" or 3/8" x 1/16"

Dimension: 210mm x 110mm x 170mm

Illumination: LED

Illumination Power: 2 pcs 1.5V alkaline (LR44) or silver (SR44) batteries

Weight: 2000g

Battery Installation and Battery Check

1. Open Back Cover

Lift Back Cover Opening Knob (15) to open Back Cover.

2. Load the batteries

Remove Battery Compartment by turning it counter-clockwise with a coin. Insert two batteries inside the battery holder with plus(+) side facing up. Then replace the holder in the compartment and tight it by turning clockwise.

3. Check the batteries

Set the shutter speed at 60 or 250, and advance the Shutter Cocking Arm as shown by the arrow with a click while press and hold down the multi-exposure button,

Push down Illumination Button by the side of shutter Speed Dial Plate while the shutter is cocking, the LED inside Exposure Drum should be turned on; If LED becomes dim, the batteries might be exhausted and must be replaced.

Note 1. When check the batteries, the shutter has must been cocked.

Note 2. Do not use batteries of various types or fresh and low at the same time.

Note 3. When using the camera below 0℃, please use new silver oxide batteries.

Note 4. Do not unseal the batteries, or put them into fire.

Note 5. Used batteries should be removed from the camera to prevent the fluid leakage from the batteries.

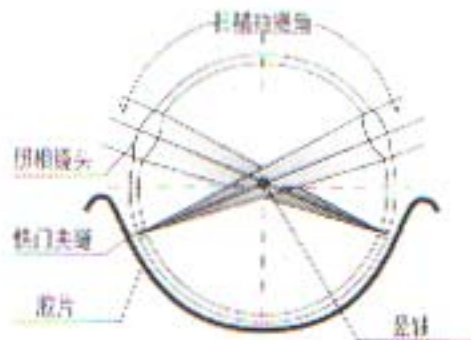


结构原理与主要用途

照相机镜头绕竖轴水平旋转,与竖轴平行的快门狭缝随之逐步旋转,景物经照相镜头和快门狭缝成像于竖轴同轴的圆柱胶片面上。

发条释放力驱动照相镜头和快门狭缝旋转,齿轮组变速控制胶片曝光时间(亦即快门有效曝光时间,俗称快门速度)。

采用120胶卷,旋转连续拍摄,画幅长宽比达1:2.2;成像清晰,色彩逼真,操作简捷;适宜于大场景的宽幅摄影,广泛应用于视野宽广的风光摄影、新闻摄影、团体摄影以及狭小空间和特殊环境下的摄影。



相机视图与结构名称

1. 快门释放按钮
2. 卷片旋钮
3. 多次曝光钮
4. 取景器
5. 水准器
6. 快门速度调节盘
7. 快门速度标志/照明按钮
8. 快门上弦扳手
9. 受光窗及照相镜头
10. 镜头光圈调节轮
11. 摄影距离调节轮
12. 握持柄
13. 倒片钮(135胶卷专用)



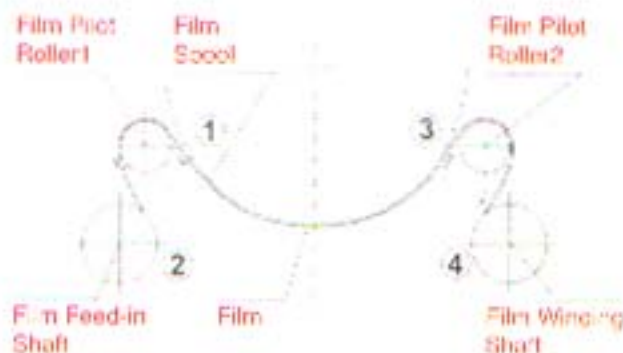
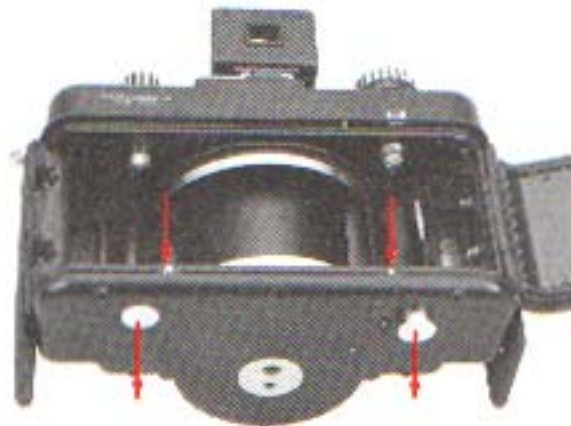
Film Loading and Exposure Counter

1. Loading preparation

- (1). Open Back Cover.
- (2). Exposure Counter will be set at its original position automatically, which shows "S".
- (3). Insert 120 Film Winding Shaft
Press down Film Winding Shaft Take-off Button to spring out Winding Shaft (Down). Insert Take-up Spool (without film) into Film Winding Shaft (Upper), then push down Film Winding Shaft (Down) to catch the hole at the end of the spool.

2. Load the 120 film or 220 film

- Load the film as shown in Fig
- (1). Through Film Pilot Roller 1
Insert the film tip through Film Pilot Roller 1 and pull out the tip.
 - (2). Load Film Feed-in Shaft
Press Film Feed-in Shaft Take-off Button to spring out Film Feed-in Shaft (Down). Insert Film Spool into Film Feed-in Shaft(Upper), then push down Film Feed-in Shaft (Down) to catch the hole at the end of the spool.
 - (3). Through Film Pilot Roller 2
Insert the film tip against the film plane, and pull out the tip from Film Pilot Roller 2.
 - (4). Insert into the slot
Insert the tip into the slot of Take-up Spool.
 - (5). Load to its position
Rotate Winding Knob anti-clockwise, till the Film Starting Index (▲ ▼) is aligned with Film Start Index on film plane.



(6). Close Back Cover

Close Back Cover until the Back Cover Opening Knob returns to its original position.

(7). Information Clip

On Back Cover, there is an information clip for holding the film packages with detailed information.

3. Exposure Counting

First frame (120, 220 film)

(1). Keep on winding as shown(2) by the arrow until Winding Knob could not be moved further, the Counter displays "0".

(2). Advance the Shutter Cocking Arm to cock the shutter.

(3). Press the Shutter Release Button to release the shutter.

(4). Turn the Winding Knob until it could not be moved further., when the Counter displays "1", you can take the first picture. You must advance the film at first, and then cock the Shutter.

(5). You can take picture after cocking the shutter.

(6). Repeat the step 3 and step 4, you take pictures until the film is over.

4. Retrieving Film

(1). After the Frame 6 of 120 Roll Film or frame 12 of 220 Roll Film has been exposed, press down Multi-Exposure Button to cock the shutter.

(2). Keep on pressing the Multi-Exposure Button while rotating the Knob to rewind the film back into Film Winding Shaft.

(3). Slide the Back Cover Opening Knob up to open it.

(4). Press down Film Winding Shaft Take-off Button to spring out Film Winding Shaft (Down), then take out the exposed film.

Notice: Avoid direct sunshine while loading and retrieving the film.



Setting Shutter Speed

1. Setting the shutter speed

Rotate Shutter Speed Dial Plate until the desired speed is aligned with Index Mark.

2. Cocking the Shutter

(1). Set the shutter speed at 1/60 or 1/250 sec.

(2). Wind Shutter Cocking Arm count-clockwise from Winding Knob side to the click position of Shutter Speed Dial side. The click sound means the shutter has been cocked.

3. Release the Shutter

(1). Push down Shutter Release Button, the shutter slot becomes open, and start to move, scan and expose the film clockwise at set speed.

(2). When the shutter slot rotates to the finishing position, it will be closed immediately.

Note 1: When the speed is set at 1/2 sec, the rotation resistance from gear transmission becomes stronger, so the extra force will be implied on the shutter cocking. Be sure to set the shutter speed at 1/60 or 1/250 sec while cocking the shutter, then wind the Shutter Speed Dial at 1/2 second.

Note 2: The shutter must be cocked into the position at one time, the hand could not be moved away from Shutter Cocking Arm till you hear a "Click" sound.

Note 3: Shutter Speed Dial Plate should be set in the "Click" position. If the Shutter Speed Dial not be set in the correct position, the camera can be destroy easily.



Focal Distance and Aperture

1. Adjustment method

After cocking the shutter, according to the shooting distance and the desired exposure value, respectively rotate Distance Adjusting Wheel and Aperture Adjusting Wheel to set the F number and Focal Distance. You can read the index from the Exposure Drum.

Attention: The best imaging point designed for this lens is marked as a green point on the photography distance ring, and its corresponding photography distance is about 5m. Recommend using it to shoot large team photo or landscape picture, and the high quality photo will be available. This point's Depth of field with different Aperture refer to the depth of field chart.

30. Shooting Distance Index

31. Shooting Distance

32. Aperture Index

33. Aperture



2. Illumination in Exposure Drum

When Exposure Drum is not well illuminated, push down Illuminator Button by the side of Shutter Speed Dial Plate after cocking the shutter, LED will shine on the index of the shooting distance and aperture on the lens.

Holding and Support

1. Holding

Keep your fingers cross Hand Grip to hold the camera body. Do not hold the camera convex plane or the grip ring to avoid the finger blockage of exposure angle .

2. Supporting

There are 2 kinds of Tripod Sockets for this camera. When use a tripod, please rotate tightly the screw into the socket with correct screw sizes.

34. Hand Grip

35. Holding Surface

36. Convex Plane



View Finding and Camera Leveling

1.The Viewfinder features

- (1). Ultra-wide angle, the field of view in width is larger than 75%.
- (2). With Spirit Bubble Level, seen inside and above the viewfinder.
- (3). Detachable for separate use.
- (4). Direct vision viewfinder, no auto parallax error correction for close distance.

2. The tips of viewfinding

- (1). Keep your eyes close to middle of Viewfinder Eyepiece.
- (2). If you are short sighted, please rectify your eyesight before View finding.
- (3). The deviation of your eyes with the center of Viewfinder Eyepiece. Will result in the deviation of viewfinding center and shooting field of view center.

3. Camera Leveling

Observe the bubble in Spirit Bubble, when it is in the center, that means the camera is in leveling status.

Special Operation

1. Anti Rewinding Operation

The Shutter Cocking Arm is interrelated with film advancing, before cocking the shutter, you must wind the film first, or you may not operate.

2. Multi-exposure

When you finish the first exposure, please press down Multi-Exposure Button, then cock the shutter, the multi-exposure could be achieved. Make sure that the camera should be supported firmly to avoid film overlapping.

Note: When using multi-exposure function, Avoid moving the subject or shaking the camera during shooting, please mount your camera on a tripod.

Accessories of PRO II camera

1. 135 Film Adapter

The camera is suitable for 120 film (6 exposures each roll), 220 film (12) exposures each roll) and 135 film. When using 135 film, you must select special accessories. For 36 exposure film (35mm) you can get 10 panoramic exposures.

Please read the user's manual for optional accessories carefully before loading a 135 roll film and taking pictures.

2. Filter

The filters are used in special occasions. There are 12 sets of filters to be provided

Category:

1. Black & White Photography: red, green, yellow.
2. Correct the color temperature: 81B, 82B, 85A, 80A
3. Special filters: Neutral Gray Dimmer 50% Filter
Fluorescence Adjustment Mirror FL

WIDEPAN Lens Swing Style Camera Depth of Field Chart f=50mm							
Depth of Field Distance	F3.8	F4	F5.6	F8	F11	F16	F22
2.0m	1.69-2.44	1.68-2.46	1.58-2.72	1.45-3.21	1.32-4.16	1.14-8.12	0.98-∞
3.5m	2.66-5.10	2.63-5.22	2.40-5.50	2.11-10.3	1.84-37.6	1.51-∞	1.24-∞
green point(5)	3.3-7.7	3.2-8.05	2.85-11.5	2.45-33.0	2.14-∞	1.68-∞	1.38-∞
7.0m	4.30-18.8	4.22-20.6	3.64-∞	3.02-∞	2.49-∞	1.92-∞	1.51-∞
∞	9.13-∞	8.76-∞	6.58-∞	4.80-∞	3.58-∞	2.52-∞	1.65-∞

WIDEPAN Lens Swing Style Camera Depth of Field Chart f=50mm							
Depth of Field Distance	F3.8	F4	F5.6	F8	F11	F16	F22
7ft	5.88-8.65	5.62-8.76	5.46-9.74	4.99-11.7	4.51-15.66	3.88-35.7	3.33-∞
10ft	7.66-13.75	7.77-14.03	7.13-16.7	6.35-23.5	5.59-47.5	4.66-∞	3.88-∞
15ft	10.7-25.4	10.9-26.4	9.36-37.8	8.06-108.3	7.04-∞	5.51-∞	4.55-∞
25ft	14.8-78.6	14.5-85.6	12.45-∞	10.58-∞	8.40-∞	6.45-∞	5.35-∞
∞	29.9-∞	28.7-∞	21.6-∞	15.7-∞	11.76-∞	8.27-∞	6.10-∞

全景幅 / PRO II 型

镜头旋转式照相机

中美合资南昌凤凰-潘福莱专业照相机有限公司
NANCHANG PHENIX-PANFLEX TECHNICAL CAMERA CO., LTD

<http://www.phapan.com>

办公地址: 上海市安福路298号2号楼5楼C座 邮编: 200031

生产地址: 江西省上饶市光学路1号 邮编: 334000

国内销售总代理: 上海凤凰光学有限公司

地址: 上海市中山北路864号1101室

电话: 021-66613468 66613469

邮编: 200070

14. 导片辊 1

15. 后盖开启钮

16. 照明电池室

17. 供片轴上轴芯

18. 取景目镜

19. 胶片对位标志

20. 计数窗

21. 卷片轴上轴芯

22. 倒片释放钮(135胶卷专用)

23. 后 盖

24. 卷片轴脱开按钮

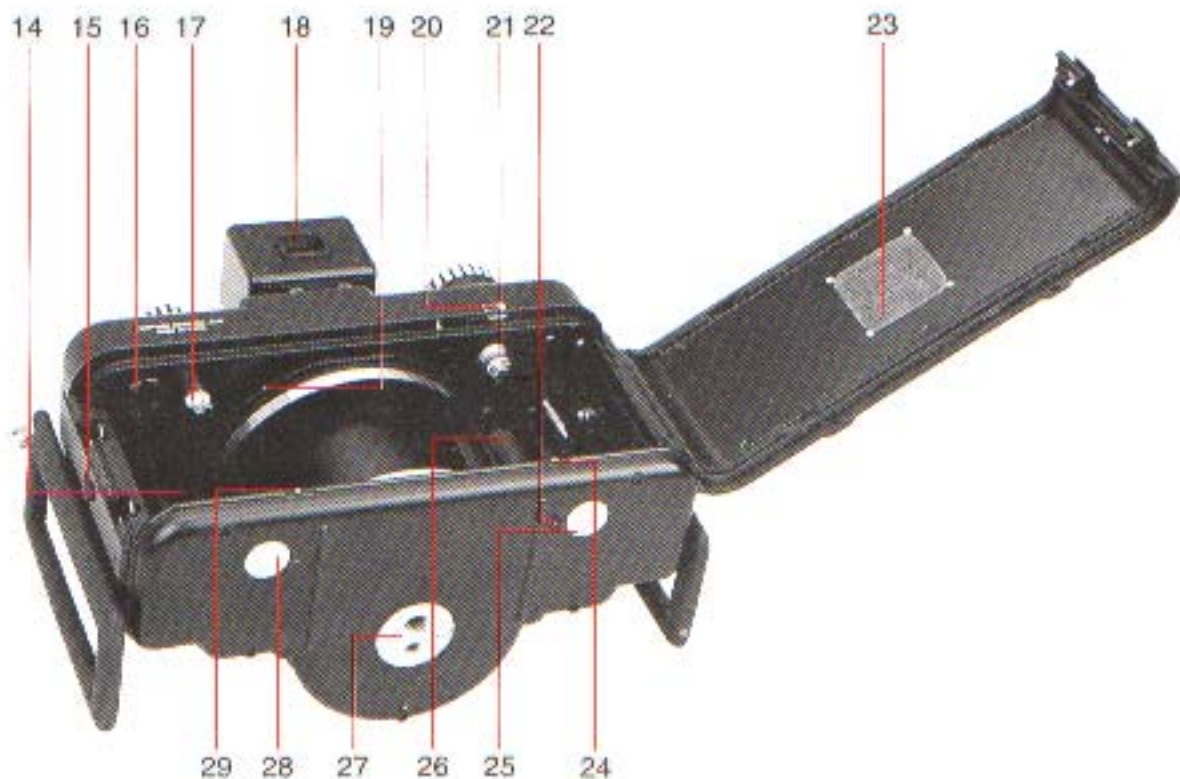
25. 卷片轴下轴芯

26. 导片辊2

27. 三脚架螺孔

28. 供片轴下轴芯

29. 供片轴脱开按钮



功能型式与主要规格

使用胶卷: 120、220、135胶卷

拍摄范围: 扫描拍摄, 镜头旋转140度

画幅尺寸: 120胶卷50mm × 110mm可拍摄6幅
220胶卷50mm × 110mm可拍摄12幅
135胶卷24mm × 110mm可拍摄10幅

镜头型式: 天塞型, 4片3组

镜头焦距: f 50mm

快门型式: 固定缝宽、旋转式焦面快门

胶片面: 圆柱型胶片面

水准器: 圆形水准器, 取景器内(或上方)观察

镜头光圈: F3.8-F22, 共7档指示, 无级调节

快门速度: 1/2s、1/60s、1/250s, 共三档

取景器: 可卸式透视取景器, 倍率0.4X

摄影距离: 2m-∞

卷片机构: 旋转输片, 自动定位

计数器: 顺加式计数, 自动计数归零

三脚架螺纹: 1/4" × 1/20" 和 3/8" × 1/16"

外形尺寸: 210mm × 110mm × 170mm

受光窗照明: 发光二极管(LED) 照明

照明电源: 2枚1.5V碱性电池(LR44) 或氧化银电池(SR44)

重量: 2Kg

电池安装与电能检查

1. 开启后盖

向上拨动后盖开启钮(15)至锁紧扣脱开,即可开启后盖。

2. 安装电池

用硬币按逆时针方向拧开照明电池室盖。按电池室盖上电池极性标志将2枚电池置入电池室盖。再将电池室盖装回原处,并按顺时针方向旋紧。

3. 电能检查

快门速度设定为“60”或“250”档,按下多次曝光按钮并按图所示方向扳动快门上弦扳手至其可靠定位(即听到“嗒”的一声)止,使快门上弦。按下快门速度调节盘一侧的照明按钮,受光窗内LED的亮度应点亮;若LED亮度昏暗,则表明电能即将耗尽,务请及时更新电池。

注1: 电能检查必须在快门上弦的条件下进行。

注2: 不同种类的电池或新旧电池切勿混合使用。

注3: 在0℃以下的低温环境使用时,请换用新的氧化银电池。

注4: 切勿拆解电池,更不可将电池投入火中。

注5: 电能耗尽的电池,应及时从相机内取出,以免电池漏液腐蚀构件。



胶卷装卸与卷片计数

1. 安装准备

- (1). 开启后盖
- (2). 计数器自动归零，计数窗此时显示起始标志“S”。
- (3). 装入120卷片轴

按下卷片轴脱开按钮，卷片轴芯向外弹出。将无胶卷的片轴插入卷片轴上轴芯，再将卷片轴下轴芯推入片轴下端孔内。

2. 装入120胶卷或220胶卷

按图示顺序安装胶卷

- (1). 穿过导片辊1

将胶卷片头穿过导片辊1，从胶片导轨侧拉出。

- (2). 将胶卷装入供片轴

按下供片轴脱开按钮，供片轴芯向外弹出。将胶卷的片轴插入供片轴上轴芯，再将供片轴下轴芯推入片轴下端孔内。

- (3). 穿过导片辊2

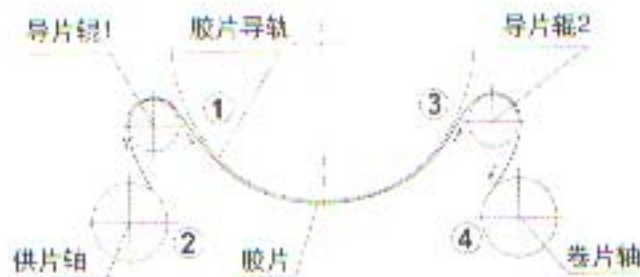
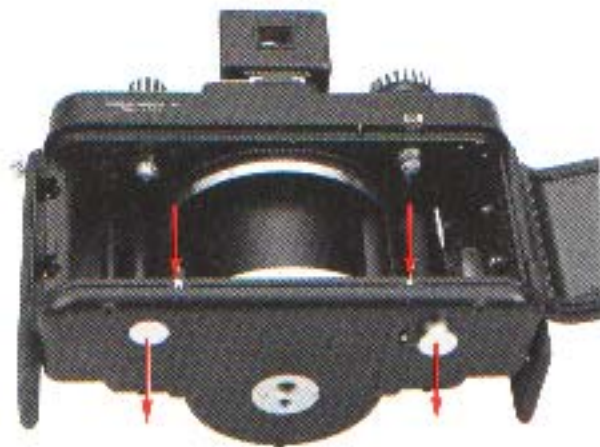
将胶卷片头从胶片导轨侧插入，穿过导片辊2后拉出。

- (4). 插入卷片轴槽

将片头插入卷片轴的片槽。

- (5). 安装到位

按逆时针方向旋转卷片旋钮，直至胶卷上的起始标志(上、下向箭头)对准胶片导轨上方的胶片起始指示点。

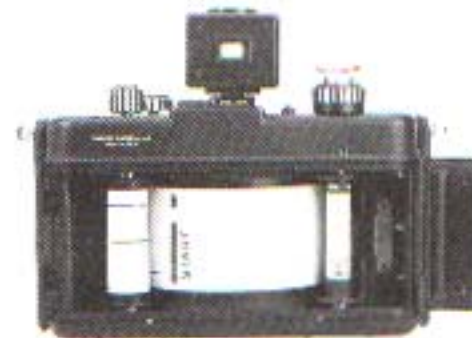


(6). 关闭后盖

关闭后盖，确认后盖开关推钮(15)复位到底。

(7). 装夹资料

后盖上备有资料夹，供插入胶卷包装盒盖等所需资料使用。



3. 胶片计数

120、220胶卷第一画幅

(1). 按卷片钮(2)上的箭头方向旋转卷片钮卷片至转不动时，计数器显示“0”。

(2). 扳动快门上弦扳手使快门上弦。

(3). 按下快门释放按钮使快门释放。

旋转卷片钮至转不动止，此时计数窗显示“1”，即可拍摄第一张画幅。拍摄后应先卷片后才能将快门上弦。

(4). 使快门上弦，则可拍摄。

(5). 重复步骤3、4，则可拍摄其它画幅至拍摄完第六画幅。

4. 取出胶卷

(1). 120胶卷第6画幅或220胶卷第12画幅拍摄完成后，按住多次曝光钮将快门上弦。

(2). 按住多次曝光钮并维持，同时旋转卷片旋钮将片尾卷于卷片轴芯上。

(3). 向上推启后盖开关推钮使后盖开启。

(4). 按下卷片轴脱开按钮，卷片轴下轴芯向外弹出，即可取出已拍摄的胶卷

注意：在装入或取出胶卷时应避开直射光线

快门操作与速度调节

1. 快门速度调节

旋转快门速度调节盘，使所需快门速度标记值对准快门速度指示标志。

2. 快门上弦

- (1). 将快门速度调至1/60s或1/250s档。
- (2). 按图示方向扳动上弦扳手，由位于卷片旋钮侧逆时针旋转至快门速度调节盘侧，当听到“嗒”的定位声，表明快门上弦已完成。

3. 快门释放

- (1). 按下快门释放按钮后，快门狭缝自行开启，按设定的快门速度所对应的转速，进行顺时针旋转扫描曝光。
- (2). 快门狭缝旋转至终止位置后自行关闭。



注1：当使用1/2s的快门速度时，调速齿轮组转动的阻力较大。因此要使用该档快门速度时，应先将快门速度置于“60”或“250”档完成快门上弦后再旋转快门速度调节盘调节到“2”速度档。

注2：扳动快门上弦扳手使快门上弦时必须一次到位，至听到“嗒”的上弦定位声时方可。

注3：快门速度调节盘应调节到位，务请体察弹子定位手感；若设定的快门速度档未可靠定位时释放快门，易损坏机构。

摄影距离与光圈调节

1. 调节方法

快门上弦后, 根据被拍摄主体与胶面距离及曝光量要求, 分别旋转镜头光圈调节轮和摄影距离调节轮, 并从受光窗观察照相镜头上两个指示标志的指示数是否符合设定要求。

注: 摄影距离环上的绿点为该镜头设计的最佳成像点, 其对应的摄影距离约为5m, 推荐使用该点来拍摄大型团体合影或风光照片可获得最佳像质。该点在不同光圈下的景深请参见景深对照表。

2. 窗内照明

当受光窗内光线不足时, 可在快门上弦后按下快门速度调节盘外侧的照明按钮, 即能照亮照相镜头上的摄影距离和光圈指示值。

握持要求与支承连接

1. 握持要求

握持相机时, 手指穿过握持手柄持于相机握持面; 手指位置不得超过凸台面与握持面的交平面, 以免遮挡住画面。

2. 支承连接

本相机具有两种规格的三脚架连接螺孔。使用三脚架拍摄时, 请将三脚架连接螺钉旋入相匹配的连接螺孔内并旋紧。

30. 摄影距离指示标志

31. 摄影距离值

32. F数指示标志

33. 光圈F数



34. 握持手柄

35. 握持面

36. 凸台面

