



## Description of the PHOTOSONICS 4B - 35mm Highspeed Camera

- Framing Rates:** From 420 to 2.100 fps at five selectable rates:  
420, 840, 1.260, 1.680 and 2.100 fps
- Operating Voltage:** 220 VAC
- Current Draw:** 32 A (run-up peak)
- Film:** 35mm negative (normal stock, BH 4740 perforation, .1866" pitch).  
The camera runs perfectly at all speeds with normal stock.
- Magazines:** Three 1000 feet (305m) magazines. 400 feet (122m) loads can be used in these magazines.
- Exposure Time:** The camera is fitted with a 72 degree rotary shutter.  
This means that the exposure times are:  
1/2.100 sec. @ 420 fps  
1/4.200 sec. @ 840 fps  
1/6.300 sec. @ 1.260 fps  
1/8.400 sec. @ 1.680 fps  
1/10.500 sec. @ 2.100 fps
- Movement:** The film is transported by a large sprocket.  
The image is moved with the film by a four-sided prism.
- Image Steadiness:** The image made with any prism camera is not as steady as the image made with a well-adjusted claw camera. The slight unsteadiness becomes noticeable only if there are rock-steady foreign elements in the image.  
In other words, shots taken with a prism camera are not suitable for use as title backgrounds.
- Please note:**  
Wooden floor could reduce the image steadiness.
- Light Loss:** The prism loses 1/2 f-stop.



## Description of the PHOTOSONICS 4B - 35mm Highspeed Camera

### Viewfinder:

There are two possibilities. The standard is a reflex viewfinder attached to the Pentax mount.

All other lenses have to be operated through the viewfinder-system based on the "ground glass" film.

#### 1. Pentax Mount - Beam Splitter 1/2 f-stop compensation

The ground glass is etched with:

Academy (1,37:1)/ TV-Transmitted (1,33:1)/ TV-Safe (1,33:1)

#### 2. The camera is not fitted with a viewfinder in the usual sense.

Framing and focussing are carried out on a piece of matted clear-film on which a grid is drawn. This serves as a substitute for the usual ground glass.

The "ground glass" film is etched with:

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After framing and focussing have been completed, the "ground glass" film is removed and the film for the shot is laced up. As soon as the matted film has been removed, there is no way of viewing the image.

### Lenses:

#### a) Pentax Lenses: - Pentax Mount with Reflex Viewfinder

35mm Fisheye T4,5

45mm T4

55mm T4

90mm T2,8

105mm T2,4

135mm T4

150mm T2,8

165mm T4

#### b) Nikon Lenses: - Nikon Mount

20mm T2,8

24mm T2

35mm T2

55mm T2,8 Macro

85mm T2

105mm T2,8 Macro

200mm T4 Macro



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### Optional Available:

- c) Cinevision Macro Lenses: - BNCR Mount
  - 100mm T2 Macro
  - 135mm T2 Macro
- d) Cooke Zoom: - BNCR Mount
  - 20-100mm T3,1
- e) Canon Telefoto Lense: - BNCR Mount
  - 300mm T2,8 + Extender x1,4 / x2
- f) Innovision: BNCR Mount
  - Probe II Plus T6,3 Tubular Lense System 180° or 90°

### Customer Lenses:

#### IMPORTANT

before every job, the lenses going out are checked and the flange-focal distance adjusted for the camera. If customer lenses are to be used, there may be difficulties in adaption. In any case, the lenses must be in a BNCR mount (no adapter). No part of the lens may extend more than 17,5mm behind the mount flange. Parts lying further back than that, would damage the prism.

### Tripod:

The camera can be used on any tripod with a 3/8" mounting screw. Since the camera ready to run weights more than 80kg (175 lbs), the tripod and head should be payloadrated accordingly. We offer a Worrall Head on Heavy Duty Legs mounted through Mitchel-Base. Since a certain amount of vibration can occur during the camera run, it is advisable to give the tripod used extra bracing or stiffening.



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