Simultaneous Recording of Oscilloscopic Traces and Visual Phenomena

The optical and mechanical design of WF-14 and WF-15 cameras permits the simultaneous high-speed photography of a mechanical action and its related electrical characteristics. Non-electrical problems such as strain, vibration, pressure, acceleration by amplification of small increments of mechanical movement, can also be studied when photographed on the screen of a cathode-ray oscillograph.
HOW CAMERA WORKS

Dual photography is not difficult. The visual action is photographed in the usual manner through the front or "taking" lens. The side lens of the FASTAX High-Speed camera is focused on the oscilloscopic image. By means of an auxiliary prism, exposure of the oscillograph trace is continuously superimposed over the regular image on the emulsion side of the film, where it is available for study and measurement.

FASTAX High-Speed Motion Picture-Oscillographic cameras can be used either for making high-speed motion pictures, or for recording oscillograph traces, or both.

DRAWING OF LIGHT PATH FROM SUBJECT TO FILM AND FROM OSCILLO TO FILM

1. Subject
2. Subject Taking Lens
3. Rotating Prism
4. Film Transport
5. Film
6. Oscillo-Tube
7. Oscillo-Taking Lens
8. Auxiliary Prism

TECHNICAL SPECIFICATIONS

Frame Size: 8mm, 8mm Double Width, 16mm

POWER REQUIREMENTS FOR MINIMUM-MAXIMUM SPEEDS:

<table>
<thead>
<tr>
<th>Frame Size</th>
<th>Minimum</th>
<th>Maximum</th>
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<tbody>
<tr>
<td>8mm</td>
<td>16 volts DC, 2.5 Amperes Approximately</td>
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<tr>
<td>8mm Double Width</td>
<td>28 volts DC, 3.3 Amperes Approximately</td>
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<tr>
<td>16mm</td>
<td>80 volts AC, 1.5 Amperes Approximately</td>
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<tr>
<td>8mm Double Width</td>
<td>280 volts AC, 15 Amperes Approximately</td>
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Film Capacity: Up to 400 ft. daylight spools
Camera Speeds: WF-15 pictures per second
             WF-14 pictures per second
Motors: 110 volt AC-DC
Lenses: Taking lens 50mm /f2 Fastax Rapitar
        Oscillo lens 35mm /f2 Fastax Rapitar
        Other focal length lenses are available on request
Viewfinder: Reflex-type, through the lens
Cut-off Switch: Automatic shut-off on completion of film transport
Timing Light: To record time interval on edge of film

* (For motion picture only)

PHYSICAL CHARACTERISTICS

38 pounds
Weight:
38 pounds
Weight in shipping case:
14" x 17" x 13"
Size:
Color: FASTAX Gray
Lens Mount: Bayonet Type
Tripod Mount: 3/8" x 16 NC

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