

# GENERAL CATALOG

effective as of march 28th 1955

#### CANON CAMERA COMPANY, INC.

Manufacturer of Canon Cameras, Lenses and Accessories Shimo-maruka-cho, Ohta-ku, Tokyo Tel. 73-2191, 73-6111

#### CANON GINZA SERVICE STATION

3-5 Ginza, Chuo-ku, Tokyo Tel. 57-3767, 57-7389

#### CANON OSAKA SERVICE STATION

2 Umeda, Kita-ku, Osaka Tel. 45-6331~8





## **GENERAL INFORMATION**

The Canon System of Photography, comprising Canon Cameras, Lenses and Accessories, is a product of the Canon Camera Co., Inc., Tokyo, Japan's largest manufacturer of cameras and camera equipment.

Canon's factories cover a quarter of a million square feet, and employ close to 1000 skilled artisans. The most advanced equipment and testing devices and procedures are used, as well as a design and engineering staff whose equal is found nowhere else in the world. Thus, the owner of any of Camera's over 130 integrated components is assured the highest standards of quality at all times.

This price list is effective as of March 28th, 1955, and shown with and without the inclusion of Commodity Tax in Japanese yen and U.S dollar (¥360.00 to \$1.00). List prices are subject to change without notice.

CANON PRODUCTS ARE SOLD ONLY THROUGH CAMERA RETAIL STORES AND DEPARTMENT STORES THROUGHOUT JAPAN. NO DIRECT RETAIL SALES ARE UNDERTAKEN BY THE CANON CAMERA CO., INC.

#### FIVE YEAR WARRANTY

The original purchaser of a Canon Camera is protected by a Five Year Warranty, against all defects or faulty workmanship or material, providing he returns the registration card supplied within 10 days from the date of purchase. The Canon Camera Company shall in turn forward him the Warranty Certificate.

WARNING: All new Canon Cameras are accompanied by the Registration Cards. The protection by the Five Year Warranty is fulfilled by the manufacturer only when the card is duly filled in and returned within 10 days from the date of purchase. Please be sure to obtain retailer's signature on the card.

# FOREIGN TRAVELERS ARE EXEMPTED FROM TAX

Foreign travelers who are in possession of the Foreign Exchange Record Book issued by the Customs at the time of entrance are entitled to purchase Canon products exempted from Commodity Tax, provided that the amount sufficient to cover the purchase has been exchanged to Japanese yen from foreign currency at the authorized foreign exchange bank, and that it is registered to the effect in the book by the bank.

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## CANON CAMERAS

CANON IV-Sh WITH CANON 50 mm f: 1.5 LENS C-10310C

Catalog No.

35 mm Canon Camera, frame 24×36 mm. Focal plane shutter with two dials for setting speeds: high speed dial sets speeds of 1/30, 1/60, 1/125, 1/250, 1/500, 1/1000 sec. and Bulb (B); slow speed dial sets speeds of 1/30, 1/15, 1/8, 1/4, 1/2, 1 sec. and Time (T). Built-in synchronization for flash bulbs and speedlight (electronic flash); for speedlight synchronization both dials are set on "X" mark; side mounting bracket with built-in electrical terminal for Canon Flash Unit model Y (on page 32) or for adapter (on page 34) to connect speedlight unit, etc. Single eyepiece for both range and view-finder, with adjustable field-of-view for 50 mm, 100 mm or 135 mm lenses, or for magnification (1.5 X) of subject to permit critical focusing.

Telescopic film take-up spool to facilitate removal; shutter winding knob has film reminder scale with ASA ratings and also total film length reminder; die cast body luxuriously finished in satin chrome with black-grained vinyl covering. Please see page 12 for detail of the lens. Guaranteed for FIVE YEARS from date of purchase detail on page 2). Take-up spool, magazine and cowhide leather carrying case included. For rapid film winding device please see page 8.

¥ 85,000.00 (US\$ 236.11), without tax ¥ 65,380.00 (US\$ 181.61)

#### **EVEREADY CARRYING CASE for Canon Camera** IV-Sb and II-S Catalog No. M-20101

Included with the Camera, but is also available as separate. Top quality genuine cowhide leather carrying case for Canon camera IV-Sb or II-S mounted with Canon 50 mm f: 1.5, 50 mm f: 1.8, or 50 mm f: 2.8 lens. Camera is held firmly to the case by safety screw. Top cover may be detached for easier operation of camera, side flap opens for mounting Canon flash Unit Y listed on page 32, adjustable neck strap included.

¥ 2,000.00 (US\$ 5.56),

without tax ¥ 1,540.00 (US\$ 4.28)

#### SPECIAL EVEREADY CARRYING CASE "A" for Canon Camera Cat. No. M-21801, M-21802

Same quality as above, with additional features of carrying camera mounted either with Canon standard lens 50 mm f: 1.5, 50 mm f: 1.8, or 50 mm f: 2.8; or with Canon wide-angle lens 28 mm f: 3.5, 35 mm f: 2.8, or 35 mm f: 3.2; together with Canon Universal Viewfinder mounted on accessory shoe on top of the camera.

¥ 2,800.00 (US\$ 7.78),

without tax ¥ 2,250,00 (US\$ 6,25)

#### SPECIAL EVEREADY CARRYING CASE "B" for Canon Camera Cat. No. M-21811

Same quality and features as above, except that of carrying camera mounted with Canon 85 mm f:1.9, 100 mm f: 3.5, or 135 mm f: 3.5 lens.

¥ 3,000.00 (US\$ 8,33),

without tax ¥ 2,400.00 (US\$ 6.67)

#### CANON IV-Sb WITH CANON 50mm f: 1.8 LENS Catalog No. C-10310

As above, but with Canon 50 mm f:1.8 lens; Guaranteed for FIVE YEARS from date of purchase (detail on page 2); take-up spool, film magazine and leather carrying case included. Please see page 13 for detail of the lens. For rapid film winding device please see page 8.

¥74,500.00 (US\$ 206.95), without tax ¥ 57,310.00 (US\$ 159.19)

#### CANON IV-Sh BODY Catalog No. C-10310A

As above, without lens; lens opening cover is screwed in place of lens; Guaranteed for FIVE YEARS from date of purchase (detail on page 2), take-up spool, film magazine and leather carrying case included. For rapid film winding device please see page 8.

¥ 48,500.00 (US\$ 134.72), without tax ¥ 37,310.00 (US\$ 103.64)

#### CANON II-S WITH CANON 50 mm f: 1.5 LENS Catalog No.

C-10313C

Identical to above model (IV-Sb), except that the highest shutter speed is 1/500 th second. Guaranteed for FIVE YEARS from date of purchase (detail on page 2). Take-up spool, film magazine and leather carrying case included. Please see page 12 for detail of the lens. For rapid film winding device please see page 8.

¥ 78,500.00 (US\$ 218.06), without tax ¥ 60,390.00 (US\$ 167.75)

## CANON II-S WITH CANON 50 mm f: 1.8 LENS Catalog No. C-10313

As above, but with Canon 50 mm f:1.8 lens. Guaranteed for FIVE YEARS from date of purchase (detail on page 2). Take-up spool, film magazine and leather carrying case included. Please see page 13 for detail of the lens. For rapid film winding device please see page 8.

¥ 68,000.00 (US\$ 188.88), without tax ¥ 52,310.00 (US\$ 145.30)

## CANON II-S WITH CANON 50 mm f: 2.8 LENS Catalog No. C-10313B

As above, but with Canon 50 mm f: 2.8 lens. Guaranteed for FIVE YEARS from date of purchase (detail on page 2). Take-up spool, film magazine and leather carrying case included. Please see page 13 for detail of the lens. For rapid film winding device please see page 8.

¥ 58,000.00 (US\$ 161.11), without tax ¥ 44,610.00 (US\$ 123.92)

#### CANON II-S BODY Catalog No. C-10313A

As above, without lens; lens opening cover is screwed in place of lens. Guaranteed for FIVE YEARS from date of purchase (detail on page 2). Take-up spool, film magazine and leather carrying case included. For rapid film winding device please see page 8.

¥ 42,000.00 (US\$ 116.67), without tax ¥ 32,310.00 (US\$ 89.75)

## CANON II-D WITH CANON 50 mm f: 1.8 LENS Catalog No. C-10311

Identical to model II-S, except that camera does not contain builtin flash synchronizer. But flash photography is accomplished by using Canon Flash Unit B-III (on page 33). Guaranteed for FIVE YEARS from date of purchase (detail on page 2). Take-up spool, film magazine and leather carrying case included. Please see page 13 for detail of the lens. For rapid film winding device please see below.

¥ 58,000.00 (US\$ 161.11), without tax ¥ 44,610.00 (US\$ 123.92)

## CANON II-D WITH CANON 50 mm f: 2.8 LENS Catalog No.

As above, with Canon 50 mm f: 2.8 lens. Guaranteed for FIVE YEARS from date of purchase (detail on page 2). Take-up spool, film magazine and leather carrying case included. Please see page 13 for detail of the lens. For rapid film winding device please see below.

¥ 48,000.00 (US\$ 133.33), without tax ¥ 36,920.00 (US\$ 102.56)

#### CANON II-D BODY Catalog No. C-10311A

As above, without lens; lens opening cover is screwed in place of lens. Guaranteed for FIVE YEARS from date of purchase (detail on page 2). Take-up spool, film magazine and leather carrying case included. For rapid film winding device please see below.

¥ 32,000.00 (US\$ 88.89), without tax ¥ 24,610.00 (US\$ 68.36)

#### **EVEREADY CARRYING CASE for Canon Camera**

II-D Catalog No. M-20311

Included with the Camera, but is also available as separate. Same as that for Canon camera, model IV-Sb or II-S, except that it is without side opening for mounting Canon Flash Unit Y.

¥ 2,000.00 (US\$ 5,56), w/o tax ¥ 1,540.00 (US\$ 4.28)

#### CAMERA ACCESSORIES

RAPID WINDER\* Catalog No. CA-41101

Fitted on Canon camera in place of the standard baseplate. One

\* Not available until June 1955.

full pull of the trigger with your left fingers to your left winds the shutter and advances one frame of film. This operator can be performed without taking the camera off from your eye. Pictures are thus made in surprisingly quick succession, as fast as you can pull the trigger and release the shutter. The trigger folds in, and the guide bar made of light metal may be screwed off from tripod socket, for easier storage. Fits on all Canon cameras with serial number above 50,200. A slight retouching may be necessary for those up to serial number 169,999.

¥ 3,500.00 (US\$ 9.72), non-taxable item

#### CAMERA HOLDER Catalog No. CA-30101

Cradles the camera for tripod mounting in horizontal or vertical position. Bubble level assures accurate leveling. Fits almost all Canon type cameras. Invaluable for long lenses or for studio work. Complete with zippered leather case.

¥ 1,800.00 (US\$ 5.00), non-taxable item

#### CABLE RELEASE Catalog No. CA-45101

Sturdy, 10 inch release, with braided covering, screws directly into the cup of the shutter release button, providing smooth, instant contact. Set screw stop for lengthy time-exposures.

¥ 180.00 (US\$ .50), without tax ¥ 140.00 (US\$ .39)

#### SELF TIMER, Model III\* Catalog No. CA-40102

Adjustable time-delayed release for shutter, providing up to about 10 second delay. Screw directly into cup of shutter release button, automatically retracts plunger after exposure. Complete with plastic case.

¥ 1,100.00 (US\$ 3.06), without tax ¥ 900.00 (US\$ 2.50)

#### FILM MAGAZINE Catalog No. CA-10101

As a spare. One already included in camera. Holds up to 36 exposure (five feet) of film. Nickel black finish, scratch proof film

slots. Complete with plastic case.

¥ 600.00 (US\$ 1.67), without tax ¥ 460.00 (US\$ 1.28)

#### PLASTIC CASE for Canon Film Magazine Catalog No. M-10201

Included with Canon Film Magazine, but is also available as separate.

¥ 30.00 (US\$ .08), non-taxable item

#### MAGAZINE SPOOL Catalog No. CA-10201

As replacement for Canon film magazine.

¥ 100.00 (US\$ .28), non-taxable item

#### TAKE-UP SPOOL Catalog No. CA-10302

As replacement, included in camera. Unique design features extendable head that permits easy extraction, even with gloved fingers.

¥ 200.00 (US\$ .56), non-taxable item

#### LENS OPENING COVER Catalog No. CA-10501

Chrome on-brass cover screws into camera flange, when no lens is mounted on camera. Protects against dust and damage to shutter curtains.

¥ 150.00 (US\$ .42), non-taxable item

#### NECK STRAP for Canon Camera Catalog No. M-21901

Included with the camera leather case, but is also available as separate. Adjustable neck strap for carrying any model of Canon Camera.

¥ 150.00 (US\$ .42), non-taxable item

#### NECK STRAP with D-RINGS for Canon Camera Cat. No. M-21901A

Same as above, except that it is with pair of semi-circled D-Rings which are inserted to side eyes of camera.

¥ 180.00 (US\$ .50), non-taxable item.

<sup>\*</sup> Not available until June 1955.

#### TRIPOD SCREW Catalog No. CA-10601

A double threaded screw to convert metric (continental) tripod socket (large socket) of the camera baseplate to feet (small) socket.

¥ 15.00 (US\$ .04), non-taxable item

#### CANON GADGET BAG Catalog No. M-29901

Genuine cowhide leather case, reinforced with all-round zipper closing, velvet lining, partitioned with tender sheep skin. Holds Canon Camera, Canon Flash Unit Y, Wide Angle Lens (1 pc.), Long or Telephoto Lens (1 pc.), and other small accessories. Adjustable leather carrying strap with shoulder pad.

¥ 2,500.00 (US\$ 6.94), non-taxable item

#### DEVELOPING TANK Catalog No. M-92101

Tank with reel of single spiral, and locking lid with thermometer well; separate agitator. Air-insulated double wall bakelite construction keeps liquid temperature as constant as possible. Loads one roll of 35 mm 36 exposure film. Film is started from center of reel and the rest of the loading is accomplished simply by spinning motion. May be filled and emptied in daylight. Adequate venting for quick change of liquids. Liquid capacity 500 cc (17 oz).

¥ 1,000.00 (US\$ 2.78), without tax ¥ 770.00 (US\$ 2.14)

## CANON LENSES

Canon lenses are widely recognized by professional and amateur alike as the ultimate achievements in optical design and engineering. Many new optical features are found in the Canon line, with Japan as well as foreign patents having been granted for originality and exclusiveness. Canon's lenses, before leaving factory, must comply with the unwavering standards which assure Canon's superior resolution, contrast, brilliance and color fidelity.

- All Canon lenses are extra hard-coated on glass-to-air surfaces to protect the optical glass, to eliminate flare and to increase light transmission.
- All Canon lenses are interchangeable and couple automatically with all Canon-type cameras, with the exception of Canon 800 mm f: 8 which is focused and viewed through reflex mirror box.
- All Canon lenses have click stops on aperture ring, with the exception of Canon 100 mm f: 3.5 and 800 mm f: 8 lenses.
- All Canon lenses are supplied with base dust caps, lens caps, special parallax-compensating viewfinders (except Canon 800 mm f: 8) and cases.
- All Canon lenses are available either in feet or metric distance scale<sup>o</sup>.

#### STANDARD LENSES

#### CANON 50 mm f: 1.5 LENS Catalog No. L-10401

Canon's proudest achievement in high speed, highly corrected optical design. Seven elements, in non-collapsible mount and non-revolving lens head, with an angle-of-view of 46°. Excellent for candid indoor photography, without the use of flash. Extremely high resolving power, and color fidelity. Apertures from f:1.5 to f:16, with click stops. Focusing range from 3½ feet to infinity: metric calibration\*\* from 1 meter to infinity. Accepts series VII 40 mm screw-in adapter ring and series VII attachments. Net weight approximately 280 grams or

For Canon lenses with "metric distance scale", when out of stock, please allow three months for delivery after receipt of order.

<sup>\*\*</sup> When out of stock please allow three months for delivery.

10.4 oz. Comes either in a genuine leather case with lens and dust caps, or in a screw-in type transparent plastic case with lens cap. When ordering please state case desire.

In leather case: ¥ 36,650.00 (US\$ 101.81),

without tax ¥ 28,190.00 (US\$78.30)

In plastic case: ¥ 36,500.00 (US\$ 101.39),

without tax ¥ 28,080.00 (US\$78.00)

#### CANON 50 mm f: 1.8 LENS Catalog No. L-10301

A high speed lens based on an entirely new lens construction theory worked out by Canon's lens designers, succeeding in reducing residual spherical aberration to an absolute minimum, and eliminating coma as well as giving very flat image surface. Six elements, in non-collapsible mount and non-revolving lens head, with an angle-of-view of 46°. The ideal all-round standard focus lens for color and black-and-white photography. Apertures from f:1.8 to f:16, with click stops. Focusing range from 3½ feet to infinity; metric calibration° from 1 meter to infinity. Accepts series VI 40 mm screw-in adapter ring and series VI attachments. Net weight approximately 300 grams or 10.4 oz. Comes either in a genuine leather case with lens and dust caps, or in a screw-in type transparent plastic case with lens cap. When ordering please state case desired.

In leather case: ¥ 26,150.00 (US\$72.64),
without tax ¥ 20,120.00 (US\$55.89)
In plastic case: ¥ 26,000.00 (US\$72.22),
without tax ¥20,000.00 (US\$ 55.56)

#### CANON 50mm f: 2.8 Lens Catalog No. L-10605

Lens mount entirely of lightweight alloy, with attractive black and satin-chrome finish. Exceptionally sharp four element Tessar type lens, in non-collapsible mount, with 46° angle-of-view. Just as sharp as the Canon 50 mm f: 3.5 lens\*\* even at the full aperture opening. Ideal all-round lens not only for landscapes, portraitures, etc., but

\* Not available until the end of May 1955.

also for copying, enlarging work, etc., since the field is exceptionally flat even at short distance. An excellent lens for color as well as black-and-white. Apertures from £ 2.8 to £ 16, with click stops. Focusing range from 3½ feet to infinity: metric calibration\* from 1 meter to infinity. Focusing is performed by turning the knurled ring alike the long or telephoto lenses, no focusing lever. Aperture and distance scales are in white figures on black surface for easier reading in poor light condition. Accepts lens hood with series VI 34 mm adapter ring (poge 29), and series VI filters (poge 24). Lens hood may be capped inversely to the lens. Net weight 140 grams or 4.9 oz. Supplied either in a genuine leather case with lens and dust caps, or in a screw-in type transparent plasic case with lens cap. When ordering please state case desired.

In leather case: ¥16,150.00 (US\$ 44.86),
without tax ¥12,450.00 (US\$ 34.58)
In plastic case: ¥16,000.00 (US\$ 44.44),
without tax ¥12,310.00 (US\$ 34.19)

#### LEATHER CASE for Canon 50 mm Lenses

Catalog No. M-22105

As replacement. Genuine cowhide leather case with velvet lining, reinforced. Holds any of the 50 mm Canon standard lens, such as 50 mm f:1.5, f:1.8, f:1.9\*\*, f:2.8, or f:3.5.\*\*

¥ 400.00 (US\$ 1.11), non-taxable item

#### PLASTIC CASE for Canon 50 mm Lenses

Catalog No. M-12102

As replacement. Durable transparent plastic case for any of the 50 mm Canon standard lens, such as 50 mm f:1.5, f:1.8, f:1.9<sup>ns</sup>, f:2.8, or f:3.5<sup>ns</sup>. Screws into base of the case.

¥ 250.00 (US\$ .69), non-taxable item

<sup>\*\*</sup> This lens is no longer in production.

<sup>\*</sup> When out of stock please allow three months for delivery.

<sup>\*\*</sup> This lens is no longer in production.

#### CANON CLOSE UP LENSES

#### CANON AUTO-UP

Supplementary close-up lens, which is simply mounted in front of the Canon 50 mm focal length lenses; permits sharp focusing through Canon camera rangefinder in the usual manner. Eliminates cumbersome measuring of distance. Fixed parallax marker provides for parallax correction, but for accurate work the Parallax Compensator is available which is used either with Canon Universal Viewfinder or Universal Frame Finder (Sports Finder). Please see page 27. Two types are available; No. 1 and No. 2. Focusing range for the former is from approximately 56 cm (22") to 100 cm (40") and for the latter is from approximately 39 (15") to 52 cm (20"). The field-of-view for the former is from approximately 31×20 cm (12×8") to 63×42 cm (25×16") and for the latter is from approximately 21×14 cm (8×5") to 31×21 cm (12×8"). All complete with genuine leather case.

Auto-Up No. 1 for Canon 50mm f: 1.5 Lens Catalog No. LA-40301

¥ 4,500.00 (US\$ 12.50),

without tax ¥ 3,550.00 (US\$ 9.86)

Auto-Up No. 2 for the above lens Catalog No. I.A-40311

¥ 4,500.00 (US\$ 12.50),

without tax ¥ 3,550.00 (US\$ 9.86)

Auto-Up No. 1 for Canon 50 mm f: 1.8 Lens Catalog No. LA-40201

¥ 4,000.00 (US\$ 11.11),

without tax ¥ 3,170.00 (US\$ 8.81)

Auto-Up No. 2 for the above lens Catalog

No. LA-40211

¥ 4,000.00 (US\$ 11.11),

without tax ¥ 3,170.00 (US\$ 8.81)

Auto-Up No. 1 for Canon 50 mm f: 2.8"

Catalog No. LA-40401

¥ 3,600,00 (US\$ 10,00),

without tax ¥ 2,860.00 (US\$ 7.94)

#### PARALLAX COMPENSATOR Catalog No. LA-45101

Used in conjunction with the Canon Universal Viewfinder or Canon Universal Frame Finder to accurately define the field-of-view of Canon Auto-Up and to correct parallax. Fits on accessary shoe of camera.

¥ 900.00 (US\$ 2.50), non-taxable item

#### WIDE ANGLE LENSES

#### CANON 28 mm f: 3.5 LENS Catalog No. L-11101

A unique lens, embodying ultra-wide angle-of-view of 75°, with high speed. Exceptionally flat field and color fidelity, without vignetting or edge-distortion. Six elements in a non-collapsible non-revolving mount. Ideal for shooting interiors, or wherever a wide angle is required under adverse light conditions. Apertures from f:3.5 to f:22, with click stops. Focusing range from 3½ feet to infinity; metric calibration\*\* from 1 meter to infinity. Accepts series VI 34 mm screw-in adapter ring series VI filters. Lens hood must not be used. Net weight approximately 180 grams or 6.5 oz. Comes in a genuine leather case with lens cap, dust cap, and special viewfinder. This case accommodates lens with both caps covered, and special viewfinder.

¥ 27,000.00 (US\$ 75.00), without tax ¥ 20,860.00 (US\$ 57.94)

Note: To house filter use Series VI 34 mm Screw-in Adapter Ring and Series VI
Adapter Ring Insert. See pages 29 and 30.

<sup>\*</sup> Not available until the end of May 1955.

<sup>\*\*</sup> When out of stock please allow three months for delivery.

#### LEATHER CASE for the above lens Catalog No. M-22201

Supplied with the above lens, but is also available as separate. Genuine cowhide leather case with velvet lining, reinforced. Accommodates the lens with both caps covered, and special view-finder.

¥ 400.00 (US\$ 1.11), non-taxable item

#### CANON 35mm f: 2.8 LENS Catalog No. L-12301

An exclusive Canon formula permitting high speed with excellent wide angle coverage (64°). An excellent lens for color as well as black-and-white. Six elements in an non-collapsible non-revolving mount. Apertures from f: 2.8 to f: 22, with click stops. Focusing range from 3½ feet to infinity: metric calibration 1 meter to infinity. Lens hood common with Canon 50 mm f: 1.8 lens, provided series VI 34 mm adapter ring is used. Net weight 200 grams or 7.1 oz. Comes in a genuine cowhide leather case with lens cap, dust cap, and special viewfinder. The case accommodates lens with both caps covered, and special viewfinder.

¥ 21,000.00 (US\$ 58.33), without tax ¥ 16,250.00 (US\$ 45.14)

### LEATHER CASE for the above lens Catalog

No. M-22302

Supplied with the above lens, but is also available as separate. Identical in quality and construction as for Canon 28 mm f: 3.5 lens.

¥ 400.00 (US\$ 1.11), non-taxable item

#### LONG FOCUS LENSES

CANON 85 mm f: 1.5 LENS Catalog No. L-13301

Lens of superlative resolution and the highest speed in its class. Lightweight metal used partially. Ideally suited for moderate-dis¥ 52,000.00 (US\$ 144.44), without tax ¥ 40,170.00 (US\$ 111.58)

#### LEATHER CARRYING CASE for the above lens Catalog No. M-22403

Included with the lens, but is also available as separate. Genuine cowhide leather carrying case with velvet lining, reinforced. Accommodates lens with both caps covered, and special view-finder. No compartment for holding lens hood. Wrist-length strap may be extended to shoulder length by connecting extra strap provided.

¥ 750.00 (US\$ 2.08), non-taxable item

#### CANON 85 mm f: 1.9 LENS Catalog No. L-13201

Undoubtedly the finest lens in its class, combining high speed with superior resolving power, brilliance and contrast for color photography. Ideally suited for portraiture or moderate telephoto effects. Six elements in non-collapsible glossy chrome finished mount. Angle-of-view is 29°. Apertures from f:1.9 to f:16, with click stops. Focusing range 3½ feet to infinity: metric calibration® from 1 meter to infinity. Aperture and distance scales on non-glossy satin-chrome finished rings for easier reading. Accepts lens hood with series VII 48 mm screw-in adapter ring, series VII filter. Net weight 620 grams

When out of stock please allow three months for delivery.

<sup>\*</sup> When out of stock please allow three months for delivery.

or 22 oz. Comes with a genuine cowhide leather carrying case, lens and dust caps, and special viewfinder. The carrying case has a compartment to store the special viewfinder, and lens hood by capping it inversely to the lens.

¥ 29,500.00 (US\$ 81.94), without tax ¥ 22,870.00 (US\$ 63.53)

#### LEATHER CARRYING CASE for the above lens

Catalog No. M-22402

Supplied with the lens, but is also available as separate. Identical in quality and construction as for Canon 85 mm f:1.5 lens listed above, except that the size is for the above lens, and lens hood can also be accommodated by capping it inversely to the lens.

¥750.00 (US\$ 2.08), non-taxable item

#### TELEPHOTO LENSES

CANON 100 mm f: 3.5 LENS Catalog No. L-14201

Unique lightweight alloy mount, with attractive black and satin chrome finish. Critically sharp five elements lens, in non-collapsible mount, with 24° angle-of-view (magnification 2 X). Recommended for sports, landscapes, press photography. Apertures from f: 3.5 to f: 22, without click stops. Focusing range 3½ feet to infinity; metric calibration\* from 1 meter to infinity. Accepts lens hood with 34 mm screw in adapter ring series VI filter. Net weight 230 grams or 8.3 oz. Price includes genuine cowhide leather carrying case, lens and dust caps, and special viewfinder. The carrying case has a compartment to accommodate the special viewfinder, and lens hood by capping it inversely to the lens.

¥ 22,000.00 (US\$ 61.11), without tax ¥ 17,080.00 (US\$ 47.44)

#### LEATHER CARRYING CASE for the above lens

Catalog No. M-22502

Supplied with the lens, but is also available as separate. Identical in quality and construction ¥ 750.00 (US\$ 2.08), non-taxable item

#### CANON 135 mm f: 3.5 LENS Catalog No. L-15201

Ideal lens for all classes of telephoto work. Optimum aberration correction, popular four element triplet formula, in non-collapsible glossy-chrome finished mount. Angle-of-view 19°. Magnification 2.7X. Apertures from f: 3.5 to f: 22, with click stops. Focusing range from 3½ feet to infinity; metric calibration° from 1 meter to infinity. Accepts lens hood with 48 mm screw-in adapter ring, series VII filters. Net weight 580 grams or 21 oz. Price includes genuine cowhide leather carrying case, lens and dust caps, and special viewfinder. The carrying case has a compartment to accommodate the special viewfinder, and lens hood by capping it inversely to the lens.

¥ 27,000.00 (US\$ 75.00), without tax ¥ 20,940.00 (US\$ 58.17)

#### LEATHER CARRYING CASE for the above lens

Catalog No. M-22602

Supplied with the lens, but is also available as separate. Quality and construction same as for 100 mm f: 3.5 lens, listed on preceding page, except that the size is for the above lens.

¥ 750.00 (US\$ 2.08), non-taxable item

#### CANON 800 mm f: 8 LEN5\*\* Catalog No. L-17101

An extremely long-focus telephoto, of high color correction and complete distortion-free field. Two element design, with mirror reflex housing, and viewing eyepiece to be fitted in place of camera body for using the lens as a telescope. Magnification 16X, angle-of-view 3°. Apertures from f:8 to f:32. Focusing range from 22 meter to infinity.

When out of stock please allow three months for delivery.

<sup>\*</sup> When out of stock please allow three months for delivery.

<sup>\*\*</sup> Distance scale calibrated in metric only.

Complete set consists of:

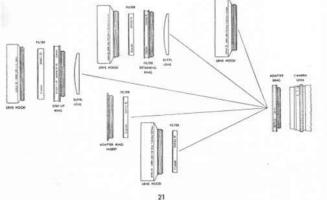
- a. 800 m f: 8 Lens (Net weight 51 kgs or 112 lbs)
- b. Mirror Box Housing
- c. Viewing Eyepiece
- d. Double Cable Release
- e. Lens Hood
- f. Filters (Screw-in type, 2 pieces; dark red and dark orange)
- g. Tripod (Net weight 121 kgs or 27 lbs)
- h. Wooden Carrying Case (to occommodate items a. to f.)
- i. Canvas Carrying Bag (to accommodate the Tripod)

¥ 175,000.00 (US\$ 486.11), without tax ¥ 142,470.00 (US\$ 395.75)

#### LENS ACCESSORIES

#### LENS HOOD

Screw-in sunshade, supplied with adapter ring. Satin chrome finish (except for Conon 50 mm f: 2.8, 100 mm f: 3.5, and 800 mm f: 8 lenses which are entirely of block finish), with dusk enamel coating in interior. Accommodates Canon and other standard (series) size filters. Recommend using lens hood made for the specific lens at all times for better picture quality.



#### For Canon 35 mm f: 2.8 or 35 mm f: 3.2\* Lens Catalog No. LA-20102D

Takes series VI filter. 36 mm series VI adapter ring included. May be used for Canon 50 mm f:1.8 lens by replacing with 40 mm series VI adapter ring. Complete with genuine cowhide leather case having a compartment for holding two filters.

¥ 970.00 (US\$ 2.69),

without tax ¥ 810.00 (US\$ 2.25)

#### For Canon 50 mm f: 3.5\* Lens Catalog No. LA-20102B

Takes series VI filter. 34 mm series VI adapter ring included. Complete with genuine cowhide leather case having a compartment for two filters.

¥ 880.00 (US\$ 2.44),

without tax ¥ 740.00 (US\$ 2.06)

## For Canon 50 mm f: 2.8 Lens Catalog No. LA=20102K

Takes series VI filter. 34 mm series VI adapter ring included. By capping inversely to the lens it may be accommodated in the camera carrying case. Available with or without genuine cowhide leather case having a compartment for two filters. When ordering please state "with" or "without" case.

Without case ¥ 800.00 (US\$ 2.22), without tax ¥ 620.00 (US\$ 1.72) With case ¥ 1,000.00 (US\$ 2.78), without tax ¥ 800.00 (US\$ 2.22)

<sup>\*</sup> This lens is no longer in production.

## For Canon 50 mm f: 1.8 Lens Catalog No. LA-20102A

Takes series VI filter. 40 mm series VI adapter ring included. May be used for Canon 35 mm f:2.8 or 35 mm f:3.2° wide-angle lens by replacing with 34 mm series VI adapter ring. Complete with genuine cowhide leather case having a compartment for two filters.

¥ 970.00 (US\$ 2.69),

without tax ¥ 810.00 (US\$ 2.25).

## For Canon 50 mm f: 1.5 Lens Catalog No. LA-20102C

Takes series VII filter. 40 mm series VII adapter ring included. Complete with genuine cowhide leather case having a compartment for two filters.

¥ 1,100.00 (US\$ 3.06),

without tax ¥ 910.00 (US\$ 2.53)

## For Canon 85 mm f: 1.9 Lens Catalog No. LA-20102E

Takes series VII filter. 48 mm series VII adapter ring included. Accommodates into lens carrying case by capping it inversely to the lens.

¥ 750.00 (US\$ 2.08),

without tax ¥ 580.00 (US\$ 1.61)

## For Canon 85 mm f: 1.5 Lens Catalog No. LA-20201

Slip-on type. Filter (special size screw-in type) fits into lens separately. Complete with genuine

cowhide leather case. Case has no compartment for accommodating filter.

¥ 1,900.00 (US\$ 5.28),

without tax ¥ 1,590.00 (US\$ 4.42)

## For Canon 100 mm f: 3.5 Lens Catalog No. LA-20102I

Takes series VI filter. 34 mm series VI adapter ring included. Will accommodate into lens carrying case by capping it inversely to the lens.

¥ 560.00 (US\$ 1.56),

without tax ¥ 430.00 (US\$ 1.20)

## For Canon 135 mm f: 3.5 Lens Catalog No. LA-20102J

Takes series VII filter. 48 mm series VII adapter ring included. Will accommodate into lens carrying case by capping it inversely to the lens.

¥ 850.00 (US\$ 2.37),

without tax ¥ 660.00 (US\$ 1.83)

#### CANON FILTERS, for Black-and-White films only

Solid optical glass, ground and polished optically flat on both surfaces, free of strain, unaffected by light or moisture.

Retained in Adapter Ring with Lens Hood or with Adapter Ring Insert, except for Ultraviolet (UV) filters which are of a screw-in type. Available in six varieties of colors in Series VI, VII, and Screw-in types.

Ultra-violet (UV) filter absorbs ultraviolet light; suited for distant, mountain, snow, and sea scenes. Screw-in type.

Yellow in two densities; light yellow (Y1) and medium yellow (Y2) filters. Light yellow filter absorbs ultraviolet and some blueviolet light; suited for general photography, renders red and yellow subjects lighter than eye sees them, darkens sky to bring out clouds, and emphasize contrast in sea scenes.

Medium yellow (Y2) has same effect as the former, only emphasizes

<sup>\*</sup> This lens is no longer in production.

the effect. Yellow filters, however, lose their effect at early morning, sunset, or under artificial light.

Light green (G0) passes green light most freely, darkens yellow, blue, orange, and red subjects.

Orange (R0) absorbs ultraviolet, blue and some green lights. Renders blue subject considerably darker while yellow and red subjects lighter than eye sees them. Most effective for distant landscape. Almost no effect, however, under artificial light.

Red (R1) for panchromatic and also for infrared films; turns blue subject darker, and red and green subjects lighter than natural, also gives moonlight effects on daylight landscape scenes. No effect under artificial light.

#### Filter Factor

Since a filter has an effect of decreasing certain colored light from reaching the film, longer exposure time is required when it is used than without. Just how much longer slightly differs according to the color-sensitivity of the film and the kind of illumination used. Figures below, based on the use of panchromatic film, are the number by which the exposure must be multiplied:

Canon Filter: UV Y1 Y2 G0 R0 R1 Filter Factor: No Change 1½ 2 4 3 5

UV Filter, 36 mm Screw-In Type\* Catalog No. LA-26101C

For Canon 28 mm f:3.5, 35 mm f:2.8 and  $f:3.2^{ee}$ , 50 mm f:28 and  $f:3.5^{e}$ , 100 mm f:3.5 lenses. Contained in transparent plastic case.

¥ 650.00 (US\$ 1.81),

without tax ¥ 440.00 (US\$ 1,22)

UV Filter, 42 mm Screw-in Type\* Catalog No. LA-26111C

For Canon 50 mm f: 1.5, 50 mm f: 1.8 and 50 mm

25

¥ 950.00 (US\$ 2.64), without tax ¥ 730.00 (US\$ 2.03)

#### UV Filter, 50 mm Screw-in Type\*\*

Catalog No. LA-26121C

For Canon  $85 \,\mathrm{mm}$  f:1.9 and f:2°, and  $135 \,\mathrm{mm}$  f:3.5 lenses. Contained in transparent plastic case.

¥ 1,350.00 (US\$ 3.75),

without tax 1,040.00 (US\$ 2.89)

# Series VI: Light Yellow (Y1), Medium Yellow (Y2), Light Green (G0), Orange (R0), Red (R1) Catalog No. LA-25101B

In colored plastic case corresponding to color of filter. Please state color when ordering.

¥ 850.00 (US\$ 2.36) ea., without tax ¥ 650.00 (US\$ 1.81) ea.

#### Set of 5 above (LA-25101B) Filters, Series

VI Catalog No. LA-25101A

In colored plastic case that screw into each other. ¥ 4,000.00 (US\$ 11.11),

without tax ¥ 3,100.00 (US\$ 8.61)

## Series VII, as above (LA-25101B) Catalog

No. LA-25201B

In colored plastic case corresponding to color of

<sup>\*</sup> Not available until the end of May 1955.

<sup>\*\*</sup> This lens is no longer in production.

<sup>\*</sup> This lens is no longer in production.

<sup>\*\*</sup> Not available until the end of May 1955.

filter. Please state color when ordering. ¥1,250.00 (US\$ 3.47) ea., without tax ¥960.00 (US\$ 2.67)

Set of 5 above (LA-25201B) Series VII Filters Catalog No. LA-25201A

In colored plastic case that screw into each other. ¥ 5,950,00 (US\$ 16.53),

without tax ¥ 4,580.00 (US\$ 12.72)

Above Filters for Canon 85 mm f:1.5 lens, Screw-in Type Catalog No. LA-25301B

In colored plastic case corresponding to color of filter. Please state color when ordering.

¥ 3,000.00 (US\$ 8.33) ea., without tax ¥ 2,320.00 (US\$ 6.44)

Above 5 Filter (LA-25301B) in set for Canon 85 mm f: 1.5 lens Catalog No. LA-25301A

In colored plastic case that screw into each other.

¥ 14,250.00 (US\$ 39.58),

without tax ¥ 11,000.00 (US\$ 30.56)

#### UNIVERSAL VIEWFINDER Catalog No. LA-31101

Brilliant erect image, field-of-view for lenses of 35 mm to 135 mm inclusive. Field-of-view unaffected by the position of eye. Parallax compensating and clear vision adjustment devices incorporated. Supplied with genuine cowhide leather case.

¥ 9,500.00 (US\$ 26.39), without tax ¥ 7,370.00 (US\$ 20.47)

28 mm FRONT ATTACHMENT LENS. Catalog No. LA-35101 Screw-in adapter for the Canon Universal Viewfinder, to provide field for the 28 mm Ultra-wide Angle Canon Lens. Supplied with leather case.

¥ 1,500.00 (US\$ 4.17), without tax ¥ 1,150.00 (US\$ 3.19)

#### UNIVERSAL FRAME FINDER, Model III Catalog No. LA-31203

Collapsible sports finder that defines the field-of-view of Canon lenses from 50 mm to 135 mm. Parallax compensating scale incorporated. Most suitable for fast-moving action such as sports event and for night photography. Supplied with cowhide leather case.

¥ 2,700.00 (US\$ 7.50), without tax ¥ 2,150.00 (US\$ 5.97)

#### SPECIAL VIEWFINDER

As replacement. Included with each lens, except 50 mm lenses. Accurately defines the field-of-view, and corrects parallax. Mounts on the accessory shoe of the camera. Please state lens specification when ordering.

For Canon 28 mm f: 3.5 Lens Catalog No. LA-30301

¥ 1,700.00 (US\$ 4.72),

without tax ¥ 1,310.00 (US\$ 3.64)

For Canon 35 mm Lenses

Catalog No.

LA-30201

¥ 1,500.00 (US\$ 4.17),

without tax ¥ 1,150.00 (US\$ 3.19)

For Canon 85 mm Lenses

Catalog No.

LA-30102A ¥ 900.00 (US\$ 2.50),

5\$ 2.50),

without tax ¥ 690.00 (US\$ 1.92)

For Canon 100 mm Lenses LA-30102B Catalog No.

-30102B

¥ 900.00 (US\$ 2.50),

without tax ¥ 690.00 (US\$ 1.92)

For Canon 135 mm Lenses

Catalog No.

LA-30102C

¥ 900.00 (US\$ 2.50).

without tax ¥ 690.00 (US\$ 1.92)

#### ADAPTER RING

This is included with the Canon Lens Hood (please see, pages 21 to 24), but is also available as separate, as follows:

Series VI, 34 mm Screw-in Type Catalog No. LA-20142A

For Canon 28 mm f: 3.5, 35 mm f: 2.8, 35 mm f: 3.2\*, 50 mm f: 2.8, 50 mm f: 3.5\*, 100 mm f: 3.5, and 100 mm f: 4\* lenses,

¥ 200.00 (US\$ .56), non-taxable item

Series VI, 40 mm Screw-in Type Catalog No. LA-20142B

For Canon 50 mm f:1.8, 50 mm f:1.9\*, and 135 mm f:4\* lenses.

¥ 200.00 (US\$ .56), non-taxable item

Series VII, 40 mm Screw-in Type Catalog No. LA-20142C

For Canon 50 mm f: 1.5 lens.

¥ 280.00 (US\$ .78), non-taxable item

Series VII, 48 mm Screw-in Type Catalog No. LA-20142D

For Canon 85 mm f:1.9, 85 mm  $f:2^{\circ}$ , 135 mm f:3.5 lenses.

¥ 280.00 (US\$ .78), non-taxable item

Screw-in ring to house a filter in Adapter Ring, without the use of lens hood. Please see diagram on page 21 for detail.

Series VI Catalog No. LA-20112A ¥ 190.00 (US\$ .53), non-taxable item

Series VII Catalog No. LA-20112B ¥ 220.00 (US\$ .61), non-taxable item

#### STEP-UP RING Catalog No. LA-20132A

Step up from Series VI to Series VII, permits use of Series VII Filters or Lens Hood, with Series VI Adapter Ring. Please see diagram on page 21 for detail. Useful where lenses of different series sizes are owned, and you wish to use the same accessories for them. Requires series VII lens hood or series VII Adapter Ring Insert to house a filter.

¥ 350.00 (US\$ .97), non-taxable item

#### FILTER RETAINING RING

Screw-in satin-chrome-on-brass ring to house two filters (some series) in combination in an Adapter Ring. Needs Lens Hood or Adapter Ring Insert to retain one of the filter. Please see diagram on page 21 for detail.

Series VI Catalog No. LA-20122A ¥ 250.00 (US\$ .69), non-taxable item

Series VII Catalog No. LA-20122B ¥ 330.00 (US\$ .92), non-taxable item

#### LENS CAP

This is included with all Canon lenses, but also available as replacement. Protective satin-chromed cap fits over front of lens when not in use.

<sup>\*</sup> This tens is no longer in production.

Size 36 mm Catalog No. LA-10102

For Canon 28 mm f: 3.5, 35 mm f: 2.8, 35 mm f: 3.2°, 100 mm f: 3.5 and 100 mm f: 4° lenses.

¥ 70.00 (US\$ .19), non-taxable item

Size 42 mm Catalog No. LA-10202

For Canon 50 mm f:1.5, 50 mm f:1.8, 50 mm f: 1.9\*, and 135 mm f:4\* lenses.

¥ 90.00 (US\$ .25), non-taxable item

Size 50 mm Catalog No. LA-10302

For Canon 85 mm f: 1.9, 85 mm f: 2", and 135 mm f: 3.5 lenses.

¥ 90.00 (US\$ .25), non-taxable item

Size 60 mm Catalog No. LA-10402

For Canon 85 mm f: 1.5 lens.

¥ 100.00 (US\$ .28), non-taxable item

DUST CAP Catalog No. LA-11101

As replacement. Satin-chromed metal cover to screw on the base of an unmounted Canon lens. Protects not only against dust, scratches, or fingerprints, but also against the most delicate part where it couples to the rangefinder of camera from being thrown out of alignment due to accidental collision, etc.

¥ 150.00 (US\$ .42), non-taxable item

#### CANON FLASH UNIT, MODEL Y

Designed for all Canon cameras with built-in flash synchronizer, such as Model II-F. II-S. IV. IV-S. and IV-Sb. A special rigidly constructed mounting device allows instant and direct mounting to the camera which automatically establishes electrical circuit with the flash synchronizer of camera, assures perfect contact at all times, cumbersome connecting cord is not necessary. Chrome-on-brass sturdy battery housing with two outlets; one for off-the-camera flash connection and the other for extension flash unit (Side Lighting Unit) connection. Micrometer synchronizing adjustment-MICRO SYNC-built in the battery housing provides accurate synchronization for all shutter speeds. Five inch focusing-type reflector for midget (bayonet base) flash bulbs, uniform light spread adjustable from 40° to 70°, satin-chrome finish for soft-tone reflection. Push button bulb ejector. Standard tripod thread (ASA) on bottom of battery cap allows mounting on tripod. With the use of Canon Flash Unit Bracket this flash unit can also be used on other synchronized cameras (Please see page 34).

MODEL YK Catalog No. CA-20602K

The above Flash Unit with Canon Capacitor Cell (a power cartridge that performs as "BC" type power).

Note: Capacitor Cell contains 200 mfd capacitor. Obtain 22 ½ volt battery listed on page 37. Operates MICRO-SYNC setting between 0 and 5, recommend using flash bulbs of "FP" and "SM" classes, "M" class bulbs not recommended.

¥ 6,900.00 (US\$ 19.17), without tax ¥ 5.570.00 (US\$ 15.47)

MODEL YL Catalog No. CA-20602L

The above Flash Unit Model Y with Canon Penlight Battery Cartridge.

Note: Obtain four penlight batteries. Operates MICO-SYNC throughout the full range, flash bulbs of three

**CANON FLASH UNITS** 

<sup>&</sup>quot; This lens is no longer in production.

classes "FP", "SM", and "M" can be fired with perfect synchronization. Life is shorter than the Capacitor Cell.

¥ 6,200.00 (US\$ 7.22),

without tax ¥ 4,870.00 (US\$ 13.53)

#### CARRYING CASE for above Flash Unit Catalog No. M-24208

Genuine cowhide leather carrying case for either Model YK or Model YL. Velvet lining, extra compartments provided for keeping flash bulbs and other small accessories. All-around zipper closing, adjustable leather carrying strap with shoulder pad.

¥ 1,600.00 (US\$ 4.44), non-taxable item

#### CANON SIDE LIGHTING UNIT, Model Y Catalog No. CA-20702

Auxiliary flash unit, for use with Canon Flash Unit Model Y, Model X (previous model to Model Y), or any other Flash Unit that has standard-size outlet. Ideal for lighting large subject and/or controlling mood of a scene. Five inch focusing-type reflector for midget (beyonet bose) flash bulbs, uniform light spread adjustable from 40° to 70°, satinchrome finished. Push button bulb ejector. Two outlets for multiple flash. Adjustable swivel head with rubber-covered heavy-duty spring clamp, may be detached from main body of unit, which can be attached on to tripod. Supplied with 15 ft extension cord "A" and zippered leather case.

¥ 5,500.00 (US\$ 15.28), without tax ¥ 4,570.00 (US\$ 12.69)

#### CANON FLASH UNIT, Model B-III Catalog No. CA-25102

B-C type, for use with Canon and similar cameras which do not have internal flash synchronizer. Synchronizes at shutter speeds between 1/60 and 1/250 sec. with focal-plane (FP) flash bulbs. Consists of black bakelite battery housing, 200 mfd capacitor provided. Satin-chrome finished 5 in. reflector. For use with 22½ volt battery. Provides bulb ejector, accessory clip, selftimer outlet, photoflash guide chart mounted in back of battery housing. No outlet for extension flash unit. Unit mount into accessory shoe on top of camera.

¥ 5,500.00 (US\$ 15.42), without tax ¥ 4,330.00 (US\$ 12.03)

#### CARRYING CASE for above Flash Unit, B-III

Catalog No. M-24109

Top-grain reinforced cowhide leather carrying case for Canon Flash Unit, Model B-III. Velvet lining, adjustable shoulder strap with shoulder pad.

¥ 1,500.00 (US\$ 4.17), non-taxable item

#### FLASH UNIT ACCESSORIES

#### SELF-EXTENSION ADAPTER Catalog No. CA-20301

For extending flash unit or connecting speedlight unit (electronic flosh unit) to synchronized Canon camera. Slide on to side rail of camera, provides two outlets. Indispensable for indirect or fill-in lighting effects.

¥ 1,000.00 (US\$ 2.78), non-taxable item

#### **EXTENSION CORDS**

Vinyl insulated cords for extending flash unit or connecting Side Lighting Unit from main Flash Unit, or for connecting speedlight unit (electroric flash writ) to camera through Self-Extension Adapter. Available in three lengths: 15, 3, and 1 ft.

> Extension Cord A (15 ft) Catalog No. CA-20801A ¥ 500.00 (US\$ 1.39), non-taxable item

Extension Cord B (1 ft) Catalog No. CA-20801B ¥ 250.00 (US\$ .69), non-taxable item

Extension Cord C (3 ft) Catalog No. CA-20801C ¥ 300.00 (US\$ .83), non-taxable item

#### FLASH UNIT BRACKETS

For mounting Canon Flash Unit, Model Y or Model X (previous model to Model Y) on to other type synchronized camera. Available in two kinds, one is for reflex-type cameras (Flash Bracket R1), and the other for cameras similar to Canon or bellow-type camera (Flash Bracket S1). Side rail collapse for easier storage. Supplied

with connecting cord having ASA terminal (Sync Cord A1), Europe terminal (Sync Cord B), or without terminal for soldering on a terminal other those of the two. Please see next page and determine which Bracket and Sync Cord are required for your camera, when ordering.

#### Flash Unit Bracket R1 with Sync Cord A1 Catalog No. CA-21202A

¥ 1.900.00 (US\$ 5.28), non-taxable item

Flash Unit Bracket R1 with Sync Cord B1

Catalog No. CA-21202B

¥ 1,900.00 (US\$ 5.28), non-taxable item

Flash Unit Bracket S1 with Sync Cord A1

Catalog No. CA-21302A

¥ 1,400.00 (US\$ 3.89), non-taxable item

Flash Unit Bracket S1 with Sync Cord B1

Catalog No. CA-21302B

¥ 1,400.00 (US\$ 3.89), non-taxable item

#### SYNC CORDS A1, B1, and S1

Used together with Canon Flash Bracket (see above) for connecting Canon Flash Unit and cameras other than Canon. Available in three types of terminal to which the camera is connected; ASA, European, and no terminal. Sync Cord without terminal is for soldering on a terminal other than the ASA or European's. Please see pages 34 and 36 for which Sync Cord is required for your camera.

Sync Cord A1 (ASA terminal) Catalog No. CA-22702A

¥ 330.00 (US\$ .92), non-taxable item

Sync Cord B1 (European terminal) Catalog No. CA-22702B

¥ 330.00 (US\$ .92), non-taxable item

Sync Cord S1 (no terminal) Catalog No. CA-22702S

¥ 280.00 (US\$ .78), non-taxable item

#### LIST OF CANON FLASH UNIT BRACKET AND CONNECTING CORD (SYNC CORD) FOR USING CANON FLASH UNIT TO THOSE CAMERAS OTHER THAN CANON

CAMERAS	BRACKET	SYNC	CAMERAS	BRACKET	SYNC
Aires 35	S1	B1	Nicca	SI	B1
Airesflex	RI	B1	Nikkenflex	R1	Al
Arco 35	SI	B1	Nikon S2	SI	B1
Asahiflex	SI	B1	Olympus 6 IV	SI	Al
Baron R	SI	A1	Olympus 6 V	SI	BI
Beautyflex	R1	B1	Olympus 35 IV	S1	A1
Contax II-A®	SI	81	Olympus 35 V	51	B1
Contax III-A®	SI	B1	Olympus 35 S	SI	BI
Cryster II-A	RI	B1	Pearl RS	SI	Al
Dolca	SI	Al	Petri RII	SI	B1
Fujicaflex	RI	Al	Primoflex III-A	RI	B1
Fujica Six	SI	B1	Primoflex IV-A	R1	A1
Kalloflex	RI	B1	Ricolet	51	Al
Konica	SI	Al	Ricolet II	SI	B)
Koniflex	RI	Al	Riken 35	SI	BI
Lacon	SI	B1	Rolleiflex	RI	B1
Leotax F	SI	B1	Super Fujica Six	SI	81
Lord 35	SI	B1	Super Mizuho Six	SI	B1
Mamiya Automat	R1	B1	Tanack S	SI	B1
Mamiyaflex	RI	B1	Topcon 35	SI	Al
Mamiya K	SI	B1	Walkon Semi	SI	81
Mihama Six VI	\$1	Al	Windsor 35	SI	AT
Minolta A	SI	B1	Yashicaflex	R1	B1
Minolta 35 II	SI	B1	Zenobia R	SI	Al
Minoltocord	RI	BI	Zenobiaflex 1	RI	A1
Minolta Semi P	SI	Al	Zenobiaflex II	RI	B1
Minon Six VI	S1	Al			

If your cameras is a make other than those listed above please inquire the nearest camera store and determine the type of bracket and connecting cord (Sync Cord) required.

Slight retouching is necessary. Please bring in to Canon Service Station. Free of charge.

#### CAPACITOR CELL Catalog No. CA-22101

Included in Canon Flash Unit, Model YK. BC type power cell for Canon Flash Unit, Model Y or Model X (model previous to Model Y). Houses 22½ Volts battery. Operates the MICRO-SYNC setting between 0 and 5, recommend using flash bulbs of "FP" and "SM" classes, "M" class bulbs not recommended.

¥ 1,150.00 (US\$ 3.19), non-taxable item

BATTERY, 221 Volts Catalog No. M-91201

221 Volts for Capacitor Cell or Canon Flash Unit, Model B-III.

¥ 250.00 (US\$ .69), non-taxable item

#### CAPACITOR Catalog No. CA-22101A

200 mfd capacitor, as replacement. Standard component of the Canon Capacitor Cell and Canon Flash Unit, Model B-III. Operates the MICRO-SYNC of Canon Flash Unit Y between settings 0 and 5.

¥ 500.00 (US\$ 1.39), non-taxable item

#### BATTERY CASE EXTENSIONS

Attaches to Canon Flash Unit Model Y or Model X (model previous to Model Y) in place of Battery Cap to permit use of 2 or 3 standard size "D" batteries for multiple flash or for operating the MICRO-SYNC throughout the full range to fire peak-type (M class) flash bulbs as well. Available in two length; one for holding two batteries and the other for three.

Battery Case Extension "A" (for 3 batteries)

Catalog No. CA-22901

¥ 650.00 (US\$ 1.81), non-taxable item

Battery Case Extension "B" (for 2 batteries)

Catalog No. CA-22901B

¥ 550.00 (US\$ 1.53), non-taxable item

#### ADDITIONAL CAPACITOR Catalog No. CA-22401

500 mfd capacitor to increase the power of capacitor cell for multiple flash photography or to operate the MICRO-SYNC scale in full range. Loaded into Flash Unit by using Battery Case Extension "A" for two Additional Capacitors, and Battery Case Extension "B" for one, both of which are listed on the preceding page.

¥ 800.00 (US\$ 2.22), non-taxable item

#### CORD CONNECTOR Catalog No. CA-21501

For connecting two extension cords in order to double the length.

¥ 300.00 (US\$ .83), non-taxable item

#### MULTI-EXTENSION SOCKET Catalog No. CA-21601

Permits up to three extensions in arranging lamps for multiple flash shots.

¥ 330.00 (US\$ .92), non-taxable item

## **CANON COPYING EQUIPMENT**

The most versatile precisely built equipment by which the following three purposes can be accomplished with extreme simplicity and accuracy:

- I. With the use of Canon Camera and Canon lens (50 mm), as described hereunder, the Canon Copying Stand provides accurate reproduction of photographic prints, typed and printed matter, engineering drawings, sketches, manuscripts, and many other similar subjects in black-and-white or in color.
- II. With the use of Macrophoto Coupler and Macrophoto Extension Tubes listed on page 45, together with Canon camera and lens (50 mm), the Canon Copying Stand provides amazingly sharp reproduction of small subjects, such as tiny machine parts, mineral and metallic surfaces, plants, insects, etc., magnified from 1½ up to 10 times the original size of the subject on the film negative.
- III. With the use of Canon camera body (lens not used) and Canon Microphoto Hood listed on page 46, the Canon Copying Stand enables to make by means of a microscope, recording of greatly magnified image of subjects, such minute subjects as medical, geological and other specimens. The magnification will be approximately 1/2.5x that of the microscope.

#### CANON COPYING STAND

Available in two models; portable model (CK-A) and table model (CK-C). Both models are identical in construction, except for the base-board. For portable model the wooden carrying case, in which the entire disassembled components and basic attachments are accommodated, is converted for the base-board, whereas for table model a solid base-board is provided, and the disassembled com-

ponents are stored in a durable card-board box with small portable wooden box for storing the basic attachments.

Chrome plated stanchion is 710 mm (28") high, which screws into base of wooden carrying case or wooden base-board; carrying arm with detachable platform which may be used to copy subjects from horizontal or vertical position. Platform houses camera which is moved with a panto-type arm to a position occupied by Focusing Glasse which is mounted on framed ground glass. Possible to copy subject size of 24×36 mm or 1×1½" (1:1) to 408×612 mm or 16×24" (1:17) by using collapsible Canon lens of 50 mm focal length such as 50 mm f:35 or 50 mm f:1.9, whereas by using rigid mount Canon lens such as 50 mm f:2.8, 50 mm f:1.8, or 50 mm f:1.5 the same copying range is accomplished with the aid of Supplementary Copying Lenses listed on page 42 (not included with the unit). Please state the model desired and the speed of your 50 mm lens, when ordering.

#### MODEL CK-A (Portable Model)

FOR USE WITH CANON 50 mm f: 2.8, f: 1.8, or f: 1.5 LENS Catalog No. A-20101B

Reproducing area from 24×36 mm or 1×1½" (1:1) to 180×270 mm or 7×10½" (1:7.5). This area can be expanded up to 480×612 mm or 16×24" (1:17) by attaching Supplementary Copying Lenses No. 1 and No. 2 as listed on page 42 (not included with the unit). Unit consists of: Stanchion, Carrying Arm, Panto-type Platform, Focusing Mount, Set of Extension Tubes (A:6 mm, B:9 mm, and C:12 mm), Right-Angle Focusing Glass with 3X Magnifier which permits focusing and observation at eye-level, Metal Measuring Tape, 2 Spare Film Magazines in Plastic Cases, Wooden Carrying Case, and Transparent Vinyl Cover for covering Carrying Arm and Panto-type Platform when the unit is not in use.

¥ 27,000.00 (US\$ 75.00), non-taxable item

<sup>\*</sup> Two types of Focusing Glass are available: the Right-Angle View and the Direct View types. The former is included in the unit, whereas the latter, which is suitable for focusing very fine subjects, is available as separate (please see page 43).

#### FOR USE WITH CANON 50 mm f: 3.5" LENS

Catalog No. A-20101B

Reproducing area from  $24 \times 36 \text{ mm}$  or  $1 \times 1\frac{1}{2}$ " (1:1) to  $408 \times 612$  or  $16 \times 24$ " (1:17). Unit consists of same items as the above.

Note: Please state when ordering if the aberture ring of your Canon or Serenar 50 mm f; 3.5 lens is WITHOUT Click stop.

¥ 27,000.00 (US\$ 75.00), non-taxable item

#### FOR USE WITH SERENAR 50 mm f: 1.9" LENS

Catalog No. A-20101A

Reproducing area from  $24 \times 36 \text{ mm}$  or  $1 \times 1\frac{1}{9}$ " (1:1) to  $408 \times 612 \text{ mm}$  or  $16 \times 24$ " (1:17). Unit consists of same items as the above, except that Focusing Mount and Aperture Ring Extension for Serenar 50 mm f:1.9 lens.

¥ 28,000.00 (US\$ 77.78), non-taxable item

#### MODEL CK-C (Table Model)

FOR USE WITH CANON 50 mm f: 2.8, f: 1.8, or f: 1.5 LENS Catalog No. A-20101F

Reproducing area and components are as same as Model CK-A (Portable Model) described in the preceding page, except that Base-board and small Wooden Storage Box for accommodating standard attachments.

¥ 25,000.00 (US\$ 69.44), non-taxable item

#### FOR USE WITH CANON 50 mm f: 3.5" LENS

Catalog No. A-20101F

Reproducing area and components are as same as the above.

¥ 25,000.00 (US\$ 69.44), non-taxable item

#### FOR USE WITH CANON 50 mm f: 1.9" LENS

Catalog No. A-20101E

Reproducing area and components are as same as Model CK-A (Portable Model) A-20101A described above.

¥ 26,000.00 (US\$ 72.22), non-taxable item

#### ACCESSORIES FOR CANON COPYING STAND

## SUPPLEMENTARY COPYING LENSES,\*\* No. 1 and No. 2 for non-collapsible Canon 50 mm lenses.

These lenses are adapted to the lens in order to expand the reproducing area up to  $408\times612\,\mathrm{mm}$  or  $16\times24''$  (1:17) as when the collapsible Canon 50 mm lenses are used, since with the use of the non-collapsible lenses the reproducing area is only up to  $180\times270\,\mathrm{mm}$  or  $7\times10\frac{1}{2}''$ . Complete with both No. 1 and No. 2 lenses.

For Canon 50 mm f: 2.8 lens Catalog No. A-25221

¥ 2,000,00 (US\$ 5,56), non-taxable item

For Canon 50 mm f: 1.8 lens Catalog No. A-25202

¥ 2,000.00 (US\$ 5.56), non-taxable item

¥ 2,700.00 (US\$ 7.50), non-taxable item

This lens is no longer in production.

<sup>\*</sup> This lens is no longer in production.

<sup>\*\*</sup> Not available until the end of May 1955.

## FOCUSING MOUNT for Canon 50 mm f: 3.5,\* f: 2.8, f: 1.8, or f: 1.5 Lens Catalog No. A-20101M

Included in both model (CK-A and CK-C) of Canon Copying Stand. Please state when ordering if the aperture ring of your Canon or Serenar 50 mm f: 3.5 lens is WITHOUT clik stop.

¥ 1,000.00 (US\$ 2.78), non-taxable item

#### FOCUSING MOUNT for Serenar 50 mm f: 1.9\* Lens Catalog No. A-20101L

Included in both models (CK-A and CK-C) of Canon Copying Stand A-20101A and A-20101E. Supplied with Aperture Ring Extension.

¥ 2,000.00 (US\$ 5.56), non-taxable item

#### FOCUSING GLASS, Right-Angle View Catalog No. A-20101Z

Included in both models, CK-A and CK-C. Permits focusing and observation of image at eye-level; has magnifier (3×) to scan field for determining sharpness. Mounts on framed ground glass situated on panto-type arm of Canon Copying Stand.

¥ 1,500.00 (US\$ 4.17), non-taxable item

#### FOCUSING GLASS, Direct View Catalog No. A-20101Y

Magnifier ( $10\times$ ) for either model CK-A or CK-C for accurate focusing of image of very fine subject. Image observed perpendicularly from above. Mount on framed ground glass situated on panto-type arm of Canon Copying Stand.

¥ 1,500.00 (US\$ 4.17), non-taxable item

#### EXTENSION TUBES: A, B, AND C Catalog No. A-20101P

Included in either of Copying Stands CK-Å or CK-C. Necessary for reproduction from  $24 \times 36 \,\mathrm{mm}$  or  $1 \times 1\frac{1}{2}''$  (1:1) to  $96 \times 144 \,\mathrm{mm}$  or  $3\frac{7}{4} \times 5\frac{1}{2}''$  (1:4). Set consists of Tubes Å, B, and C; thickness is 6 mm, 9 mm, and 12 mm, respectively.

- Extension Tube B Catalog No. A-20101R ¥ 330.00 (US\$ .92), non-taxable item
- Extension Tube C Catalog No. A-20101S

  ¥ 370.00 (US\$ 1.03), non-taxable item

  Total ¥ 1,000.00 (US\$ 2.78)

#### WOODEN CARYING CASE Catalog No. A-20101X

Included in Canon Copying Stand, Model CK-A (Portable Model).

May be used for accommodating components of Copying Stand, Model

CK-C (Table Model) for portability.

¥ 6,000.00 (US\$ 16.67), non-taxable item

#### MACROPHOTO ACCESSORIES

MACROPHOTO-COUPLER for Canon 50 mm f: 1.5, f: 1.8, and Serenar 50 mm f: 1.9\* Lenses Catalog No. A-25101L

For coupling lens inversely to Macrophoto-Extension Tube (see next page) by means of Focusing Mount (which is included in Canon Copying Stand), for taking tiny subjects (Macrophotography).

¥ 350.00 (US\$ .97), non-taxable item

#### MACROPHOTO-COUPLER for Canon 50 mm f: 2.8 and f: 3.5\* Lens Catalog No. A-25101K

For coupling lens inversely to Macrophoto-Extension Tube (see next item) by means of Focusing Mount (which is included in Canon Copying Stend), for taking tiny subjects (Macrophotography).

¥ 300.00 (US\$ .83), non-taxable item

<sup>\*</sup> This lens is no longer in production.

<sup>\*</sup> This lens is no longer in production.

#### **MACROPHOTO-EXTENSION TUBES**

For taking tiny subjects (Macrophotography) with Canon Copying Stand. Available in six lengthes: 25 mm, 50 mm, 75 mm, 100 mm, 150 mm, and 200 mm. By using these tubes individually or in combination, sharp magnified image of approximately from 1½ to 10 times the original size of subject can be recorded on film negative. Macrophoto-Coupler listed on the preceding page is used for coupling 50 mm Canon lens to the tube. Please see the table on next page for the relation between the Tube Length and Magnification, and select tube of desired length before ordering. Be sure to order proper Macrophoto-Coupler listed on the preceding page for your lens at the same time.

Macrophoto-Extension Tube 25 mm Catalog No. A=25101A

¥ 370.00 (US\$ 1.03), non-taxable item

Macrophoto-Extension Tube 50 mm Catalog No. A-25101B

¥ 500.00 (US\$ 1.39), non-taxable item

Macrophoto-Extension Tube 75 mm Catalog No. A-25101C

¥ 700.00 (US\$ 1.94), non-taxable item

Macrophoto-Extension Tube 100 mm Catalog No. A-25101D

¥ 900.00 (US\$ 2.50), non-taxable item

¥ 1,200.00 (US\$ 3.33), non-taxable item

Macrophoto-Extension Tube 200 mm Catalog No. A-25101F

¥ 1,600.00 (US\$ 4.44), non-taxable item

## RELATION of TUBE LENGTH and MAGNIFICATION

(MAGNIFICATION appr.)

TUBE LENGTH in mm	Canon 50 mm f:3.5	Canon 50 mm f: 2.8	Canon 50 mm f: 1.9	Canon 50 mm f: 1.8	Canor 50 mm f: 1.5
25	_	_	1.2		-
50	1.4	1.2	1.7	1.5	1.4
75	1.8	1.7	2.1	2.0	1.9
100	2.3	2.2	2.6	2.5	2.4
125	2.8	2.6	3.1	3.0	2.9
150	3.3	3.1	3.6	3.4	3.4
175	3.8	3.6	4.1	3.9	3.8
200	4.3	4.1	4.6	4.4	4.3
225	4.8	4.6	5.0	4.9	4.8
250	5.3	5.1	5.5	5.4	5.3
275	5.7	5.6	6.0 -	5.9	5.8
300	6.2	6.0	6.5	6.3	6.3
325	6.7	6.5	7.0	6.8	6.7
350	7.2	7.0	7.5	7.3	7.2
375	7.7	7.5	8.0	7.8	7.7
400	8.2	8.0	8.5	8.3	8.2
425	8.6	8.5	8.9	8.8	8.7
450	9.1	8.9	9.4	9.3	9.2
475	9.6	9.4	9.9	9.7	9.6
500	10.1	9.9	10.4	10.2	10.1

#### MICROPHOTO ACCESSORY

#### MICROPHOTO-HOOD Catalog No. A-25101M

By using this Hood with Canon Copying Stand it allows to make through microscope a recording of greatly magnified image of minute subjects on film. Magnification will be approximately 1/2.5x that of the microscope.

¥ 1,200.00 (US\$ 3.33), non-taxable item

## CANON PHOTOMICROGRAPHIC APPARATUS

PHOTOMICROGRAPHIC UNIT, MODEL CM Catalog No. A-30101

For photographing an image as seen through the microscope by using Canon camera body (less is not used). Image recorded on the film is 1/3x of the magnified image of microscope. Couples to ocular tube of any standard microscope with the outside tube diameter of from 24.7 to 25.2 mm. Semi-silvered beam-splitting prism in the Reflex Housing permits focusing and observation of microscope image during period of exposure through lateral telescope-type Focusing Eyepiece (10x). The prism pass through 70% of the image rays to the film and deflects 30% to the eyepiece. By inscribing information pertinent to the specimen on an erasable froasted Plastic Card provided it can be exposed on the film frame simultaneously by means of built-in Data Projector, the light intensity of which is balanced with that of microscope image by Candle Power Regulator listed on page 49 (not included with the unit). Canon camera surmounts the unit when coupled to microscope.

Consists of Reflex Housing, Focusing Eyepiece (10x), Coupler for microscope tube, Data Projector, Data Cards (5 pcs.), Pair of Spare Bulbs for Data Projector, and Plastic Dust Cap.

¥ 15,000.00 (US\$ 41.67), non-taxable item

#### 6×6 PHOTOMICROGRAPHIC CAMERA Catalog No. A-30101A

For photographing microscope image in size of  $60 \times 60 \text{ mm} (2\frac{1}{2} \times 2\frac{1}{4}'')$  on  $60 \times 90 \text{ mm} (2\frac{1}{2} \times 3\frac{1}{4}'')$  cut films. Image recorded on the film is  $\frac{1}{2}$ x of the magnified image of microscope. Reflex Eyepiece, and Coupler as for the Model CM described above are used.

The camera, which has a compur shutter of ten speeds; T, B, 1, 1/2, 1/5, 1/10, 1/25, 1/50, 1/100, and 1/200 second, is fitted in place of the cover of Reflex Housing. The shutter is actuated by cable release. No provision made for adapting Data Projector, thus titling simultaneously with exposure of specimen image as in the case with Model

CM is not possible. Image is exposed on one side of film frame, the unexposed area may be used for inscribing relative information after developed. Focusing is undertaken either by Focusing Eyepiece (included with Model CM listed on page 47) or Focusing Screen (price does not include either), both allow observation of microscope image during period of exposure as well.

All metal precision Film Pack and Cut Film Holders, both holding 2½×3½" films, slide into grooves on top of the camera. Permits rapid, easy film loading. Keeps film exactly in the focal plane over the entire surface, film septum will not scratch. Finished in dusk black lacquer.

Unit consists of: 6×6 Photomicrographic Camera, Film Pack Holder, Cut Film Holder (6 pcs.), Cable Release and ½x Attachment Lens.

¥ 13,000.00 (US\$ 36.11), non-taxable item

# ACCESSORIES FOR PHOTOMICROGRAPHIC UNIT

FOCUSING SCREEN Catalog No. A-30101B

For focusing and observation for either Photomicrographic Unit Model CM or  $6\times6$  Photomicrographic Camera. Screen diameter is 50 mm (2"). 2x Attachment Lens is adapted when used for Model CM, and  $\frac{1}{2}$ X Attachment Lens (included with  $6\times6$  Photomicrographic Camera) when used for the  $6\times6$  Camera. Consists of Focusing Screen and 2x Attachment Lens.

¥ 1,600.00 (US\$ 4.44), non-taxable item

#### PHOTOMICRO-PROJECTOR Catalog No. A-30101D

A conical tube with ground-glass-screen for group observation of specimen as seen through microscope. Mounts on microscope ocular tube by means of Coupler (included with Model CM). Microscope image projects on ground-glass-screen of 95 mm (3%) in diameter. Elavation Screw which adjust the angle of built-in mirror positions image

<sup>\*</sup> Focusing Screen may be used instead by adapting 2X Attachment Iens. See page 48 for detail.

<sup>\*</sup> ½X Attachment Lens provided is adapted when the Focusing Screen is used for the Camera.

on screen. By removing conical tube off from Mirror Housing the microscope image may be projected on movie screen.

Consists of: Mirror Housing and Screen Tube.

¥ 6,500.00 (US\$ 18.06), non-taxable item

#### CANDLE POWER REGULATOR Catalog No. A-15101

Power source for Data Projector of Model CM. A variable transformer for adjusting light intensity. Input is 100 Volts, 50 or 60 cycles; output is from 1.6 to 6.5 Volts, 2 Amperes. This Regulator is used also for Canon Photo Oscilloscope Units (page 50), Illuminating Scales (page 53), and Canon Photo Radarscope Units (page 57).

¥ 5,500.00 (US\$ 15.28), non-taxable item

## CANON PHOTO-OSCILLOSCOPE UNITS

In order to meet the demands of technicians in the industrial and scientific fields, Canon has several kits of accessories, by means of which accurate photographs may be obtained, on 35 mm film through Canon Camera, of oscilloscope traces shown by the various oscilloscopes now in common use. The Cathode-ray tube is being widely used in laboratories, for practically every phase of electronics, physics, acoustics, biology, medical science, etc. It is almost indispensable item in the application of modern techniques in academic research and industrial application. Any Canon Photo-Oscilloscope Unit referred to hereunder, will not only photograph the traces on the fluorescent screen but also will simultaneously record the data, on the same film frame. Data captioned negatives are of great value for the research worker.

Five models are available for different size of oscillo-screens; 40 mm, 50 mm (2"), 75 mm (3"), 120 mm and 125 mm (5"), and 133 mm (5 $\frac{1}{4}$ ) screens.

## SPECIFICATIONS OF CANON PHOTO-OSCILLOSCOPE UNITS

Model	CO-40	CO-50	CO-75-II-A1	CO-120-II-A1	CO-133-II
For Cathode Ray Screen Size (mm)	40	50(2")	75(3")	120 & 125(5")	133(51")
Reduction Ratio	1.66	1.66	2.5	4	4
Field (mm)	40 × 60	40 × 60	60 × 90	96 × 144	96×144
Max. Hood Dia. (mm)	80	80	105	160	160
Hood Overall Length (mm)	220	220	250	325	325
Total Weight (kg)	2(4½ lbs)	2(4½ lbs	) 2.6(5 lb	s) 3.4(7½ lbs)	3.4(71 lbs)

As for the camera and lens, Canon camera body of any model, and Canon 50 mm f:1.8 or 50 mm f:1.5, are recommended for use with the above units.

For further advanced study of oscilloscope traces of momentary phenomena, complicated fast alterating phenomena, etc., Canon has a device called the Continuous Photo-Oscilloscope Recorder designed for use with CO-75-II-A1, CO-120-II-A1, and CO-133-II. For details please see page 54.

The Hood Mounting Flange is installed on the panel of the oscilloscope by means of screws provided. And the Hood is then clamped on to the Flange of a bayonet system. Canon lens 50 mm f:1.8 or 50 mm f:1.5 is fitted into the Lens Holder which is in turn clamped into the Hood, and finally the Canon camera body, to which the Adapter Ring is screwed on, is clamped on to the rear of the Lens Holder. Observation Window provided on the Hood allows viewing of oscilloscope traces during period of exposure, as well as before and after exposure.

The Data Projector is incorporated in the Hoods of the Units CO-120-II-A1 and CO-133-II, while for the other units it is detachable. A Plastic Card. a reusable card on which data relative to the oscilloscope traces is inscribed. fits into the slot. The Data Projector is illuminated by the Candle Power Regulator, a variable transformer for adjusting the light intensity. Please see page 49 for detail. A table is provided in the instruction booklet for setting the Regulator with regard to exposure, film, and speed.

The Viewing Lens is supplied with CO-40 and CO-50 units only, for visual observation of oscilloscope traces which are magnified by about 21 times. It is inserted in place of the rear half of the Hood.

The Scale (ruled plastic screen) is supplied with all units, except CO-40 and CO-50, for visual observation study of oscilloscope traces. It is screwed into the Hood Mounting Flange. Since with this scale, however, the ruled lines do not record clearly on film negatives, the Illuminating Scale listed on page 53 (not included with the unit) powered by the Candle Power Regulator, is available for units CO-120-II-Al and CO-133-II. The ruled lines will be photographed just as clearly as visually observed.

#### MODEL CO-40 for 40 mm Oscillo-Screen Catalog No. A-10301B

Consists of: 1. Hood Mounting Flange

- 2. Hood
- 3. Lens Holder
- 4. Adapter Ring
- 5. Data Projector
- 6. Candle Power Regulator
- 7. Viewing Lens
- 8. Focusing Glass

- 9. Plastic Data Cards (5 pcs.)
- 10. Spare Bulbs (2 pcs.) for Data Projector
- 11. Lens Holder Cap
- 12. Wooden Carrying Case
- ¥ 16,200.00 (US\$ 45.00), non-taxable item

#### Catalog MODEL CO.50 for 50 mm OR 2 inch Oscillo-Screen No. A-10401B

Consists of items in Group 1, except that Hood Mounting Flange is for model CO-50.

¥ 16,200.00 (US\$ 45.00), non-taxable item

#### MODEL CO-75-II-A1 for 75 mm OR 3 inch Oscillo-Screen Catalog No. A-10104

Consists of items in Group 1, except that Hood Mounting Flange and Hood are for model CO-75-II-A1, and Viewing Lens is not included.

¥ 23,200,00 (US\$ 64,44), non-taxable item

#### MODEL CO-120-II-A1 for 120 mm, 125 mm or 5 inch Oscillo-Screen Catalog No. A-10204

Consists of items in Group 1, except that Hood Mounting Flange and Hood are for Model CO-120-II-A1, and Viewing Lens is not included. When ordering please state the size of your oscilloscreen so that we can supply proper Hood Mounting Flange.

¥ 28,200.00 (US\$ 78.33), non-taxable item

#### MODEL CO-133-II for 133 mm or 5½ inch Oscillo-Screen

Catalog No. A-10602

Consists of items in Group 1, except that Hood Mounting Flange and Hood are for model CO-133-II, and Viewing Lens is not included.

¥ 28,200.00 (US\$ 78.33), non-taxable item

#### ACCESSORIES

#### HOOD MOUNTING FLANGE

Included with the Photo-Oscilloscope set, but is also available as separate. Screws for installing on to the panel of oscilloscope are provided.

> For Model CO-40 Catalog No. A-10301A ¥ 1,300.00 (US\$ 3.61), non-taxable item

> For Model CO-50 Catalog No. A-10401A ¥ 1,300.00 (US\$ 3.61), non-taxable item

For Model CO-75-II-A1 Catalog No. A-10103A ¥ 1,760.00 (US\$ 4.89), non-taxable item

For Model CO-120-II-A1 Catalog No. A-10203A ¥ 3,400.00 (US\$ 9,44), non-taxable item

For Model CO-133-II Catalog No. A-10601A ¥ 3,400.00 (US\$ 9.44), non-taxable item

CANDLE POWER REGULATOR Catalog No. A-15101

Power source for Data Projector. Please see page 49 for detail.

¥ 5,500.00 (US\$ 15.28). non-taxable item

#### ILLUMINATING SCALES

For use with the Canon Photo-Oscilloscope Units CO-120-II-A1 and CO-133-II. Screws into the Hood Mounting Flange in place of the Plastic Scale provided for the unit. Sectioned lines grooved 2,5 mm apart on transparent plastic, illuminated by four tiny lamps situated within the rim around the perimeter, will record clearly on photographic film. Film negatives of oscilloscope traces with scale would

serve conveniently for detail study of the traces. Cord of the Scale is led out through a hole provided at the bottom of the Hood, and connected to the Candle Power Regulator, by which the brilliance of the scale (sectioned lines) is adjusted.

For Canon Photo-Oscilloscope Unit, Model
CO-120-II-A1 Catalog No. A-15401

Y 3,100,00 (US\$ 8,61), non-taxable item

For Canon Photo-Oscilloscope Unit, Model CO-133-II Catalog No. A-15411 Y 3.100.00 (US\$ 8.61), non-taxable item

## CONTINUOUS PHOTO-OSCILLOSCOPE RECORDER Catalog No. A-12101B

For the purpose of photographing oscilloscope traces, for cestain duration of time, of characteristics of complicated fast alterating or of transient phenomena for detail study, Canon has the Continuous Photo-Oscilloscope Recorder which is somewhat similar to a movie camera. Instead of putting the time axis (sweep) of an oscilloscope in operation, it uniformly advances 35 mm film or 35 mm perforated oscillo-paper, on which, for time reference, the dots are marked in sequence of certain intervals simultaneously with the traces. Eight speeds are available for advancing the film or the paper. This apparatus is used in conjunction with the entire components of the Canon Photo-Oscilloscope Unit CO-75-II-A1, CO-120-II-A1 or CO-133-II set up similarly as described on page 51. The basic components are of Camera, Driver, and Timing Signal Oscillator.

The Camera is loaded with 35 mm film or perforated 35 mm oscillo-paper in the maximum length of 100 feet wound on a spool, and is clamped on to the rear of the Lens Holder in place of Camon Camera Body. A quarter turn of the Clamp Ring accomplishes not only the installation of the camera but also the opening of the Light Shield which is tightly closed for prevention against any possible light leak when the camera is off the unit. The camera is operated by motor driven Driver having eight stage of speeds as explained

hereunder. Footage Counter indicates the exact length of film advanced. Stanchion is inserted into a hole provided on the camera for study support of the entire unit.

The Driver having a synchronous motor operated by AC 100 Volts, 50 or 60 cycles is connected to the camera by means of Flexible Shaft provided. Eight uniform speeds are available; when operated by 50 cycle power source the film in the camera will be advanced 7.6, 15.2, 30.4, 60.8, 190, 380, 760, and 1520 mm per second, and by 60 cycles they will be 9.1, 18.2, 36.5, 73, 228, 456, 912, and 1824 mm per second. These eight different speeds are secured by means of the combinations of the positions of the Pole Converting Switch and of the two knobs protruded from the transmission system. The Pole Converting Switch places the motor in either two or four poles, and the Knobs are either pushed in or pulled out for different gear ratios. Since the motor is of synchronous type the speeds are unaffected by any change of load, unless the cycles of the power source fluctuates.

The Timing Signal Oscillator is an instrument for plotting dots in sequence of 2, 10, 50, or 250 millisecond intervals on the film (or oscillo-paper) simultaneously with the photographing of oscilloscope traces. By means of these dots an operator will be able to determine the manner in which the phenomena have occurred with reference to time. Impulses generated by the oscillator are transferred to an argon lamp by which they are transformed to corresponding light beams. The housing in which the argon lamp is placed, is introduced from the bottom of the Hood. The duration of the light beams is 0.4 millisecond when the oscillator is operated at 2 or 10 millisecond frequencies, and 5 milliseconds when operated at 50 or 250 millisecond frequencies. The tolerance of the interval frequencies is within 1%. The input voltage for the oscillator may be from 80 to 100 Volts, 50 or 60 cycles; and the maximum output current is 10 milliamperes. The stability of the interval frequencies remains unaffected provided the fluctuation of input power voltage is within 10%, but should there be an excessive voltage drop, a switch within the instrument is adjusted to correct the voltage. The brilliance of the argon lamp can be varied in order to balance it with those of oscilloscope traces. On the panel of the Timing Signal Oscillator there are Time Interval Control (4 stages) with Switch, Brilliance Control (5 stages), Output Baias Control, Output Terminal with Fuse Adapter, and Input Switch.

The Canon Continuous Photo-Oscilloscope Recorder consists of Camera, Driver, Timing Signal Oscillator, Flexible Shaft, Timing Lamp Housing, and Wooden Carrying Case which accommodates all components, except the Timing Signal Oscillator and its fittings.

#### OVERALL DIMENSIONS OF MAJOR COMPONENTS

	LENGTH (mm)	WIDTH (mm)	HEIGHT (mm)
CAMERA	135 (5%")	270 (111")	100 (4")
DRIVER	310 (12")	290 (111")	155 (6')
TIMING SIGNAL OSCILLATOR	180 ( 7")	250 (10")	180 (7")

¥ 210,000.00 (US\$ 583.33), non-taxable item

## CANON PHOTO-RADARSCOPE UNITS

#### CANON PHOTO-RADARSCOPE UNITS

Almost all vessels today, whether large or small, are equipped with radarscope together with numerous other modern electronic instruments for safer navigation. Records of images of geographic location of harbor installation, ship collisions, etc., as seen through the radarscope screen are of a great value for future reference for navigators.

With the use of Canon Photo-Radarscope Unit in conjunction with Canon Camera Body and Canon 28 mm f: 3.5 Ultra-Wide Angle Lens (for 12" screen) or Canon 35 mm f: 2.8 Wide Angle Lens (for 71" screen), such recording is accomplished with extreme simplicity. Three types are available; for 12" screen radarscopes of the Radio Corporation of America (RCA) and the Sperry Corporation, and for 7% screen radarscope. The Hood is clamped on to the radarscope, and since the Observation Window having a septum is about 60× 165 mm for the 12" and about 30×80 mm for 72" screen, the image can be observed with both eyes at all times. Thus, whether or not the photographing is to be undertaken, it is not necessary to remove it from the radarscope once it is installed. Data relative to the image is photographed simultaneously with the image through the built-in Data Projector similarly as the Canon Photo-Oscilloscope Unit. The Projector is illuminated either by one 12 Volts size "D" dry battery housed in the battery compartment in the hood or by the Candle Power Regulator (please see page 49).

The Canon Photo-Radarscope Unit consists of Hood, Spare Bulbs (2 pcs.) for Data Projector, Plastic Data Cards (5 pcs.), and Wooden Carrying Case.

For RCA 12" Radarscope

Catalog No.

A-11111A

¥ 68,000.00 (US\$ 18.89), non-taxable item

For SPERRY 12" Radarscope

Catalog No.

A-11102A

¥ 65,000.00 (US\$ 18.06), non-taxable item

For 71" Radarscope Catalog No. 13201

Allow approximately two months after receipt of order for delivery. Please inquire the manufacturer for detail.

## **CANON X-RAY CAMERAS**

In order to photograph X-ray images on the fluorescent screen Canon has two kits of X-ray Cameras; Model CX-35II, frame 24×36 mm, using 36 exposure (perforated) film and Model CX-60 in which there are two types of cameras; CX-60A and CX-60B. CX-60A is for using 12 exposure 120 roll film and CX-60B is for using 24×34" cut film, frame size of either camera is 60×60 mm. Back of CX-35II and CX-60A cameras open for easier film loading. The Camera is mounted in proper position relative to the X-ray fluorescent screen by means of Mounting Flange provided. Canon 50 mm f:1.5II X-ray Lens is used for Model CX-35II camera, and Canon 100 mm f:1.5IV X-ray Lens for Model CX-60 cameras.

#### MODEL CX-35II Catalog No. CX-102

Removable camera back facilitate film loading. Consists of Camera (2 pcs.), Lens Chamber, 50 mm f:1.5II Canon X-ray Lens, Mounting Flange, Film Cassette with Plastic Case (10 pcs.), Take-up Spool (2 pcs.), and Wooden Carrying Case.

¥ 35,000.00 (US\$ 97.17), non-taxable item

#### MODEL CX-60 Catalog No. CX-1101

Hinged back facilitate film loading. Consists of 12 Exposure 120 Roll Film Camera CX-60A (2 pcs.), 2 ½ 3 ½" Cut Film Camera CX-60B, Lens Chamber, 100 mm f:1.5IV Canon X-Ray Lens, Cut Film Holder (6 pcs.), Mounting Flange (2 pcs.), Take-up Spool (2 pcs.), and Wooden Carrying Case"

¥ 66,500,00 (US\$ 184.72), non-taxable item

#### ACCESSORIES

#### X-RAY CAMERA CX-35II Catalog No. CX-101A

Uses 36 exposure 35 mm perforated film. Removable back offers easier film loading. Frame Size is 24×36 mm. Consists of Camera, Film Cassette with Plastic Case, and Take-up Spool.

¥7,925.00 (US\$ 22.01), non-taxable item

#### X-RAY CAMERA CX-60A Catalog No. CX-1101A

Uses 12 exposure 120 roll film. Hinged back facilitate film loading. Frame size  $60\times60$  mm. Consists of Camera and Take-up Spool.

¥ 8,500.00 (US\$ 23.61), non-taxable item

#### X-RAY CAMERA CX-60B Catalog No. CX-1201

Uses  $2 \nmid \times 3 \nmid ''$  cut film, frame size is  $60 \times 60$  mm. Consists of Camera and Cut Film Holder (6 pcs.)

¥ 8,500.00 (US\$ 23.61), non-taxable item

#### CUT FILM HOLDER for CX-60B X-RAY CAMERA

Catalog No.

CX-1201A

¥ 800.00 (US\$ 2.22), non-taxable item

#### FILM CASSETTE for CX-3511 X-RAY CAMERA

Catalog No.

CAX-90101

¥ 515.00 (US\$ 1.43), non-taxable item

#### DEVELOPING TANK for 120 (6×6) Film Catalog No. M-92201

Tank with plastic belt, and locking lid with thermometer well, separate agitator. All bakelite construction loads one roll of 12 exposure 120 film. May be filled and emptied in daylight. Adequate venting for quick change of liquids. Liquid capacity 600 cc (20 oz).

¥ 1,100.00 (US\$ 3.06), without tax ¥ 850.00 (US\$ 2.36)

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