## SHUTTER SPEED

5 steps shutter speeds: 1/4, 1/3, 1/2, 3/4, and 1 sec. Synchronized for bulbs and electronic flash at all speeds. The shutter can be released with a button on the camera body, or with remote control hand or foot switch supplied with the camera.

## FILM ADVANCE:

Variable film size 9mm～22mm in length, adjustable by 1mm pitch.
Film advance and shutter is cocked automatically, making it impossible to double expose override automatically locks the camera when film is near end of roll. Stops camera motor if film tears or is not feeding properly.

## FRAME SIZE:

5 aparutre masks are supplied with camera 6 sizes by selection of mask-plates.

**Standard Format Masks**



# Portable Microfilm Camera
# HIRAKAWA-16 (HK-16)
## COMPACT SUITCASE-SIZE PLANETARY 16mm MICROFILM CAMERA



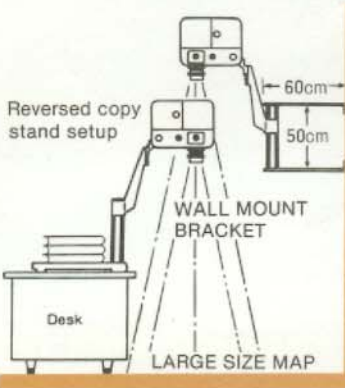| No. | NO MASK | 1 | 2 | 3 | 4 | 5 |
|-----|---------|-----|-----|-----|-----|-----|
| | 15 x 21 | 15×10.5 | 13×18.5 | 13 x 9.3 | 11.5×18 | 11.5 x 9 |
| | 22 | 11 | 20 | 10 | 20 | 10 |

CAMERA IS EQUIPPED WITH FIVE APERTURE MASKS MARKED 1-5, AND NUMBER SHOWS SIZE OF FORMAT. SET FEED DIAL AS FOLLOWS. IF NO MASK IS USED, CAMERA TAKES FULL FLAME.

## DESIGNED FOR:

HIRAKAWA-35 is designed for a wide variety of applications.
Meet the most portable most pricise approch to on-location microfilming. The new HIRAKAWA-16 (HK-16) system, ideal for copying one-of-kind documents that can't be removed from their source, as well as for permanently installed microfilming systems.
A single-lens-reflex with vacuum platen holds film flatness and maximum resolution.
It can be separated into functional units.
Complete Camera set with all neccessary accessories are packed in a carrying case.
Comlete unit including case weights 17kg.
Easy to transport but set up in 2 minutes.

## LENS

HK-16 features a high resolution 32mm f/5.6 Micro-lens for brilliant, sharp images helical focusing from 1/5～∞, over 220 lines per millimeter resolution

## REDUCTION RATIO

14×～33× stepless, can be made on the attached copyboard is 420mm×600mm (16½"×23—5/8")

## FOCUSING

Decided by either single lens-reflex-finder or built in tape measure. You can view through the lens, guided by luminous frames outlines showing the exact subject area.
The operator simply places the document on copyboard.

## MOUNTING:

HK-16 can be mounted in three different positions on a tripod or copy-stand making it possible to shoot large wall-hung drawings and maps.

### (WALL MOUNT BRACKET)          (TRIPOD)



Reversed copy stand setup

←60cm→
50cm

WALL MOUNT BRACKET

Desk

LARGE SIZE MAP

## Portable Microfilm Camera
# HIRAKAWA-16 (HK-16)

| | |
|---|---|
| Type: | Portable/desktop planetary microfilmer |
| Film: | 16mm roll 30.5m (100 ft.) |
| Lens: | F : 32mm  1 : 5.6   Distance 17cm~∞ |
| Reduction Raito: | 14×~33 stepless, can be made on the attached baseboard |
| | Stepless by adjustable camera position on column |
| Optimum reduction ratio: | 1/30 |
| Image scale: | 1/5~∞ |
| Documents size: | Attached portable baseboard A2 size 420mm×600mm (16½"×23⅝") |
| Frame size: | 5 masks are supplied with camera 6 sizes by |
| (Aperture size) | selection of Mask-plate |
| | 15×21mm, 15×10.5 |
| | 13×18.5, 13×9.3 (w/blip marks) |
| | 11.5×18, 11.5×9 |
| Film advance: | 9~22mm, adjustable by 1mm pitch |
| Film Holder: | Vacuum platen system |
| Exposure Cycle: | 2 seconds/frame (30 shots/minute) |
| Focussing: | Built-in tape measure or through-the-Lens finder |
| Shutter: | 5 steps shutter speeds: |
| | 1/4 sec., 1/3 sec., 1/2 sec., 3/4 sec. and 1 sec. |
| | Synchronized for bulbs and electronic flash, at all speeds |
| Release Switch: | Button on camera-body, or with remote control hand or foot |
| | switch supplied with camera |
| Leader/Trailer/Space: | Push button control |
| Indexing: | Blip aperture plates; full/half sizes |
| Illuminations: | 60W incandescent lamps×4 (4 spair bulbs) |
| Electrical Requirements: | 100−120V or 220V−240V: 50−60Hz, 250W |
| Indications: | Film Supply Indicator, Improper film treading warning |
| Demensions: | 1,280mm×600mm×420mm (H×W×D) |
| Carring case: | 470mm×770mm×150mm (18½"×30"×6") |
| Weight: | 17kg (37 lb) (including carrying case) |

## INSTALLATION OF HIRAKAWA-16 STANDARD SET

HIRAKAWA-16 (HK-16) is packed in a carrying case, separated into functional units:
HIRAKAWA-16 camera body, Lens 32mm 1/5.6, Image finder & cap, Aperture plate ×5, Filter (ND2),
Power cord, Switch cord with w/release switch, Incandescent lamps 60W (110,
220, 240V)×8, Light arm ×2, 2 light sockets assemblies ×2; Baseboard,
Sub-board ×2, Column, Mounting arm, Extension camera stage, Wrench key,
Extension cord w/table tap, reel (16mm), Carrying case w/shoulder belt.