## SPECIFICATION

#### **MULTIGRADE 500H ENLARGER HEAD**

Dimensions Height 216mm

Width 316mm Depth 173mm

Weight

3kg excluding light mixing box and adaptor

kit

Construction

Black stoved aluminium alloy sheet and extrusion, with polycarbonate end plates

Electrical cord

(integral)

Multicore Length 2m

Maximum voltage 120Vac

Lamps

Two 120Vac 300W ANSI code ELH

Quartz halogen projection lamp with

dichroic reflector.

Heat filters

Four 30x15x2mm heat absorbing glass

Color filters

Two 25x25x1mm. One blue and one green dichroic interference filter coating on glass substrate. Tempered for maximum stability. Cut-off wavelengths selected to give optimum grade range on ILFORD variable

contrast paper.

Cooling fan

115Vac 21W dynamically balanced

centrifugal type. The fan cools both lamp

and filter assemblies.

Safety features

Safety cut-out cuts power to lamps under

abnormal operating conditions, eg fan

failure.

Micro-switch cuts power to lamps and fan

when door is opened.

Light mixing boxes

Diffuser type adaptor kit

Up to three sizes are supplied to cover the following negative sizes: up to 35mm, from 35mm to 6x7cm and from 6x7cm to 4x5

inches.

Condenser type adaptor kit

One box is supplied. Negative coverage is

limited only by your enlarger.

Note

In all cases, the light mixing box or boxes are supplied with the adaptor kit.

#### **MULTIGRADE 500CPM CONTROL UNIT**

Dimensions	Height 46mm Width 186mm		
	Depth 192mm		
Weight	1 • 2kg		
Construction	Black stoved aluminium alloy extrusion, with zinc die-cast end plates  Multicore Length 2m		
Electrical cord			
(separate)			
Features	Listed below. Operation of each is by an illuminated button, except for 'expose-cancel' which is a raised bar. Audible confirmation of control operations can be selected.  Exposure time - 0 to 99.9 seconds in steps of 0.1 seconds.  Grade - 0 to 5 in half-grade steps.  Memory and Memory clear - for storage of 1 main exposure and up to 8 additional exposures.  Burn  Bleep  Prints counter and Prints clear  Focus		
Display	Expose-cancel  Digital, 7 segment LED		
Electronics	Microprocessor incorporating memory		
Additional features	Sockets for optional exposure probe and footswitch.  Program switch to compensate for lamps that vary in light intensity.  Automatic voltage compensation for variations in mains voltage up to ±4%.		

#### **MULTIGRADE 500S POWER SUPPLY**

Dimensions	Hoight 175		
D'IMCHS TOHS	Height 175mm Width 254mm		
	Depth 140mm		
Weight	10·3kg		
Construction	Totally enclosed unit using black stoved aluminium alloy extrusions, with zinc		
	die-cast end plates		
Electrical cord	3 core, live, neutral and earth		
(separate)	Length - 2m		
Mains input	Voltage 120Vac.		
	Frequency 50 or 60Hz (automatic selection).		
	Power consumption 600W maximum.		
Replacement fuses			
Mains input	120V 6.3A SB		
Safelight socket	250V 1A.		
Outputs	Control unit		
	Enlarger head		
	1A supply for local safelight		

#### **MULTIGRADE 500P EXPOSURE PROBE**

Dimensions	Height 19mm Width 50mm Depth 155mm	
Weight	0.35kg	
Construction	Black stoved zinc die-casting Multicore Length 1.2m	
Electrical cord		
(integral)		
Controls	Measurement period initiated by push button incorporating LED indication. Ten position calibration knob	
Exposure times	1 to 50 seconds (1 second at 20 lux baseboard illumination)	
Repeatability	Without safelights, better than $\pm 2\%$ With safelights, typically $\pm 4\%$	

Constant improvements in ILFORD products mean that changes in design or specification may occur from time to time. It will not always be possible to amend instructions at the same time, and the right to alter the design and specification of the equipment without prior notice is accordingly reserved.

MULTIGRADE 500 is covered by patents and patent applications.

#### Australia

ILFORD PHOTO (Australia) Pty Ltd PO Box 144 Mt Waverley 3149 Victoria

#### **Belgium**

SA ILFORD PHOTO NV Kazernenlaan 39 B-1040 Brussel

#### Canada

ILFORD PHOTO (Canada) Limited 2751 John Street Markham Ontario L3R 2Y8

#### Denmark

ILFORD PHOTO A/S Gadelandet 18 DK-2700 Brønshøj

#### France

ILFORD PHOTO SA BP 336 Chemin de la Fouillouse F-69802 Saint-Priest Cédex

#### Germany

ILFORD PHÓTO GmbH Postfach 124 D-6078 Neu-Isenburg

#### Holland

ILFORD PHOTO BV Jan Rebelstraat 5 Postbus 9040 NL-1006 AA Amsterdam

#### Italy

ILFORD PHOTO SpA Origgio (Va) Casella Postale 77 I-21047 Saronno

#### Sweden

ILFORD PHOTO AB Box 3052 S-400 10 Göteborg

#### **Switzerland**

ILFORD PHOTO AG/SA Rue de l'industrie 15 CH-1700 Fribourg 5

#### **United Kingdom**

ILFORD PHOTO Company 14-22 Tottenham Street GB-London WIP 0AH

#### USA

ILFORD PHOTO Corporation West 70 Century Road PO Box 288 Paramus New Jersey 07653

If your country is not shown here, please contact: ILFORD PHOTO International ILFORD Limited 14-22 Tottenham Street GB-London WIP 0AH England

## ILFORD MULTIGRADE 500CPM

COMMENTS	MEMORY	GRADE	TIME-PRINTS
	1		
	2		
	3		
	4		
	5		
	6		
	7		
	8		
	9		
	R APERATURE	ENLARGE	NEGATIVE REFERENCE
	PRINT SIZE		FILE NUMBER

## ILFORD MULTIGRADE 500 SIMPLIFIED INSTRUCTIONS 50Hz/60

# **OPERATING**

2

MULTIGRADE 500CPM ILFORD

TIME-PRINTS

GRADE MEMORY

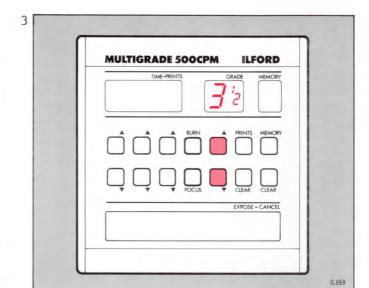
PRINTS MEMORY

PRINTS MEMORY

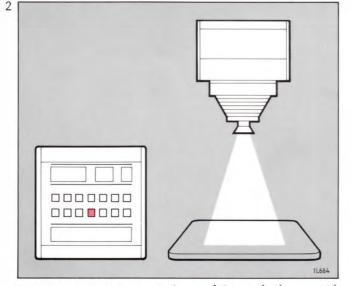
CLEAR CLEAR

EXPOSE - CANCEL

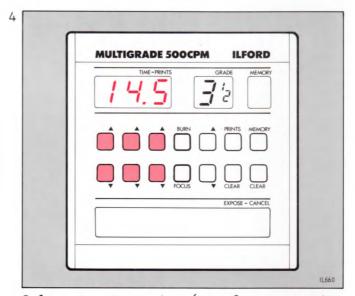
Switch on. Ensure typical display.



Select contrast (or after operation 5).



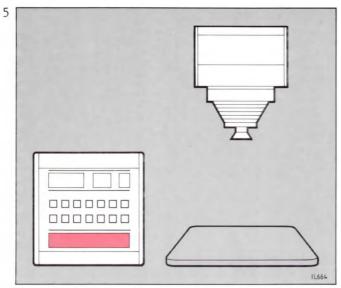
Locate negative. Select 'focus' (note 1).



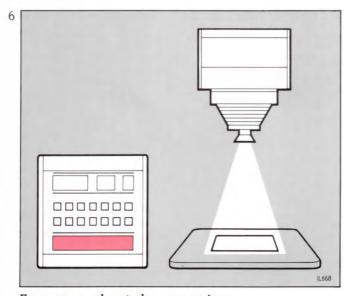
Select exposure time (or after operation 5).

## **IMPORTANT NOTES**

- 1 Light suitable for focusing, composition and assessment is projected.
- 2 If the print density is correct but a different grade of contrast is required, select the new contrast. It is not necessary to alter exposure time since light intensity is adjusted automatically across the range of contrasts.



Press 'expose-cancel' to cancel 'focus'.

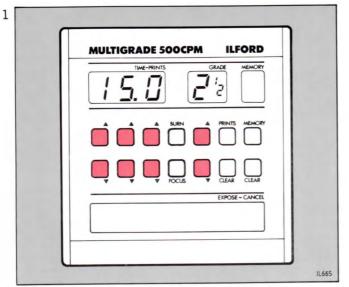


Expose a sheet by pressing 'expose-cancel' (note 2).

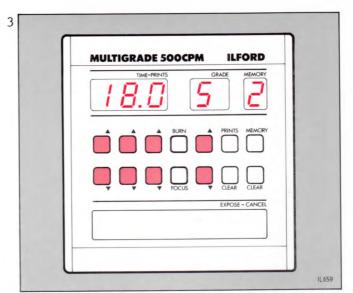
## ILFORD MULTIGRADE 500 SIMPLIFIED INSTRUCTIONS 50Hz.

# MEMORY

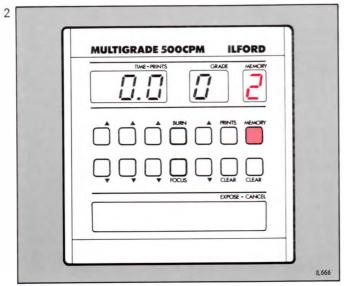
## **PROGRAMMING**



Select exposure time and grade (note 1).



Select exposure time and grade (note 3).

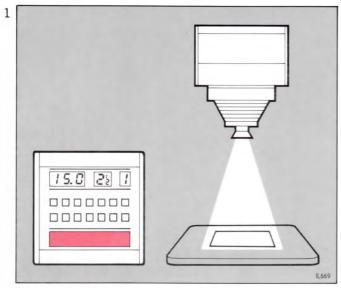


Press 'memory' (note 2).

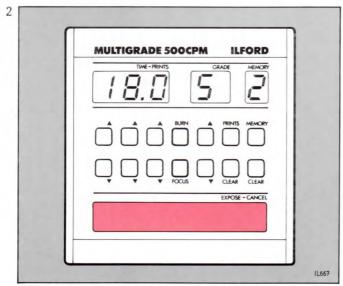
### **IMPORTANT NOTES**

- 1 Main exposure. This will become memory '1'.
- 2 Memories '2' to '9' (maximum) for additional exposures.
- 3 Repeat operations 2 and 3 until the required number of memories have been stored. Return to memory '1' by pressing 'memory' then 'expose-cancel'.
- 4 Shade paper as required. Repeat operation 2 until the last of the stored memories has been run. Two audible signals are given and the control unit returns to memory 'l' ready to run the sequence again.

### **USING**



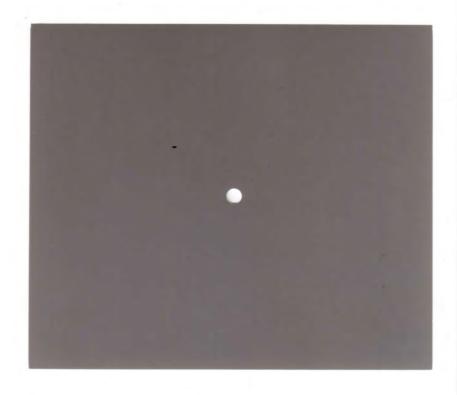
Expose a sheet by pressing 'expose-cancel'.



Press 'expose-cancel' to start memory '2' (note 4).

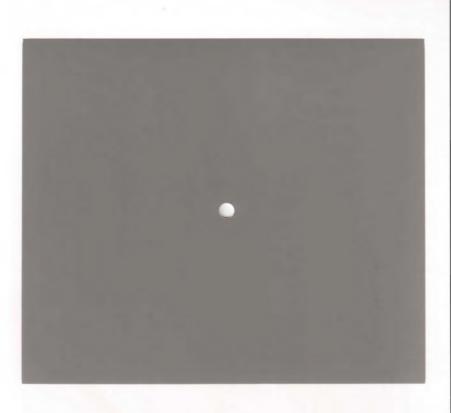
MID-TONE DENSITY

## ILFORD MULTIGRADE 500



MID-TONE DENSITY

# FORD ILTIGRADE



.20

.30

.50

1.00

1.30