Data Sheet: LDS 1088

Stereo Zoom Microscope: 59-020-200

Date: 18-11-2010

Page 1 of 3



Packed W	eight an	d Dimensio	ns
----------	----------	------------	----

Code	Description	Weight g	W mm	H mm	L mm
59-020-200	Stereo Zoom Microscope	7950	310	245	550
59-020-046	Wide Field Eye Piece 16 x	179	80	40	80
59-020-047	Wide Field Eye Piece 20 x	160	85	45	53
59-020-048	Wide Field Eye Piece 25 x	181	80	40	80
59-020-050	Objective Lens 0.5 x	112	60	35	60
59-020-051	Objective Lens 0.75 x	94	60	35	60
59-020-052	Objective Lens 1.5 x	112	60	35	60
59-020-053	Objective Lens 2.0 x	94	60	35	60
59-020-201	Base Illumination: Fluorescent Lamp 6v – 5w	280	35	20	115
59-020-202	Top Illumination: Halogen Lamp 6v – 15w	13	33	33	40
59-020-400	Illuminator Unit	520	215	77	258
59-020-401	Annular lamp	53	125	25	164

Standard Magnification Chart

Eyepiece Magnification	Zoom Setting	Viewed Magnification	Field of View	Focal Working Distance
			mm	mm
10	0.65	6.5	30	90
10	1.0	10	20	90
10	2.0	20	10	90
10	3.0	30	6.6	90
10	4.5	45	4.4	90

Data Sheet: LDS 1088

Stereo Zoom Microscope: 59-020-200

Page 2 of 3

1 2		
	1 V	Wide Field Eye Piece (2)
	2 R	Rubber Eye Cups (2)
	3 E	Diopter Adjustment Ring (left and right hand)
	4 P	Prism Cover (left and right hand)
	5 Z	Zoom Adjustment Knob (2)
	6 V	Vertical Focus Knob (2)
(18)	7 S	Support Collar Clamp
		Jpright Column
	9 I	llumination Brightness Control
(16)	10 I	llumination 4 Position Selection Switch
	11 S	Specimen Clip (2)
	12 S	Stage Plate
9	13 S	Stage Plate Retaining Screw
(15) 10	14 N	Microscope Base
	15 T	Fop Illumination Lamp Housing
	16 C	Objective Lens Cover
(13) (12)	17 N	Microscope Head Retaining Collar
	18 N	Microscope Head

Operating Instructions:

Unpack the microscope from its fitted shipping box. Retain all packaging for later use if repair is required Remove the protective plastic bags which cover the Microscope Base (14) and Microscope Head (18) Place the microscope base onto a solid work surface

Carefully fit the Microscope Head into the Head Retaining Collar (17) and lightly tighten clamp screw Remove the plastic protection plugs from each of the Diopter Adjustment Collars

Remove both Wide Field Eye Pieces from the packaging and fit into the Diopter Adjustment Collars (3) Fit Rubber Eye Cups (2) to the Eye Pieces.

Fit required Stage Plate (12)

Stage Plate 1: Black one side, white one side

For light opaque objects use black side with top lighting for best contrast

For dark opaque objects use white side with top lighting for best contrast

Stage Plate 2: Frosted glass, 95mm dia. x 4.3mm thick

For heavy translucent objects, use bottom lighting

- Stage Plate 3: Frosted glass, 87mm dia. x 2.3mm thick.
- For light translucent objects, use bottom lightingNote:For objects with both opaque and translucent parts both lights can be used
Use Stage Plate Retaining Screw to secure plate in position

Illumination System:

There are 2 styles of operating switches depending on the age of the microscope Original model: Illumination Brightness Control for top lamp (9) Illumination 4 Position Selection Switch (10) Position1, OFF, Position 2 Top light only, Position 3 Bottom light only, Position 4 both lights Current model: Rocker Switch On/Off for bottom light only (situated left hand rear on base) Rotation Switch for top light On/Off and brightness control

Copyright: Linear Tools 2010

Data Sheet: LDS 1088

Stereo Zoom Microscope: 59-020-200

Date: 18-11-2010

Page 3 of 3

Viewing the Object:

Unscrew the black plastic protection plug situated below the Objective Lens Cover (16) Place the object/specimen on to the selected stage plate Adjust the height of the Microscope Head on the Upright Column to achieve a good working height between the specimen and the Objective Lens, lock the Head firmly in this position. Specimen Clips (11) should be used for thin specimens to hold them flat and stop them from moving Turn the Zoom Adjustment Knob (5) to its lowest power 0.65 Slowly turn the Vertical Focus Knob (6) to bring the specimen in to view Use the Vertical Focus Knob to achieve the sharpest image possible Adjustments should be made to the Eye Pieces so they match the interpupillary distance between your eyes The Eye Pieces can be pulled apart or pushed together to obtain a single clear image. Use the Diopter Adjustment Rings (3) to individually adjust the focus for each eye It is recommended that when this adjustment is being carried out that only the eye being corrected should be open. Each user of the microscope will need to make these adjustments to suit their own eyes

For higher magnifications turn the Zoom Adjustment Knob to obtain the magnification to suit the best view of your specimen. It will be necessary to refocus very slightly when changing the magnification

Tension Adjustment:

The tension of the focus mechanism is factory preset, however due to extended use it may lose some of its tension which will result in the Microscope Head slowly drifting downwards.

The unit can be corrected by holding the right hand focus knob still whilst turning the left hand focus knob in a clockwise direction

Replacing Illumination Lamps:

Top Lamp: Halogen Skirted 6v - 15w, (Maximum skirt diameter 35mm) Code 59-020-201 Unplug the microscope from the power supply and allow it to cool Unscrew the Top Illumination Lamp Housing (15) and carefully pull out the used lamp Line up the 2 prongs of the new lamp with the fitting and push into place Finally replace the threaded lamp housing

Bottom Lamp: Fluorescent 6v – 5w, Code 59-020-202 Unplug the microscope from the power supply and allow it to cool Do not attempt to remove the lamp through the stage plate hole Turn the microscope through 90° so it rests on the column clamp screw Remove 4 screws from inside the rubber feet and allow the base plate to come forward and sit on the work surface The lamp is held in position by 2 plastic clips situated above and below the lamp fitting Carefully release the 2 clips and gently pull out the lamp. The new lamp can be pushed into place and will be retained automatically by the 2 clips Replace base plate and screws

Cleaning:

Always use the Dust Cover whenever the microscope is not in use Lens surface cleaning; first remove dust with a soft brush or compressed air from a can Moisten a piece of lens cleaning paper or lens cloth with a lens cleaning solution Wipe exterior of eyepiece and objective lenses using a circular motion Repeat with dry paper or cloth until the lens is clean and dry. Lens cleaner should not be sprayed directly onto the lens