

"N.O.W." New Z series Research

A GREAT INVESTMENT TO
For Medical
For Clinical
For Pharmaceutical
For Bio-Technology
For Natual Science



ZN Model :

Built-in 6V-20W
variable halogen lamp,
large mechanical stage,
quintuple nosepiece, its ideal
as the standard routine works of microscope
in every performance, easy operation, economic,
availabilily, reasonable resolution and etc.....

and Laboratory Microscope

THE 21st CENTURY



ZS Model :

Built-in Koehler illumination system and 6V/30W high intensity halogen lamp brought highest resolution of excellent optical components and extended the availability as the research microscope with complete line up of optional accessories.



BINOCULAR HEAD ZB-45 (For ZN Model)

45° inclined, 360° rotatable, sliding type interpupillary distance adjustment from 53mm to 72mm, diopter adjustment ring on both eyepiece tubes, increased brightness in the field of view and decreased the difference of the brightness of the field of view between of right and left eyepiece with multi-coating high quality prism.



TRINOCULAR HEAD ZT-45 (For ZN Model)

With same optical design and specifications with binocular head, but with vertical photo tube for the microphotography and also interchangeable with C-mount tube to be connected with TV camera for the TV monitoring. For the microphotography or TV monitoring the light path can be changed by the lever to be divided into 20% for binocular and 80% for photo tube or C-mount tube.



MONOCULAR HEAD ZM-30 (interchangeable)

30° inclined, 360° rotatable, in the field of view with multi-coat designed to be preferable for mi



OPTICAL COMPONENTS (For ZN Model)

AC Series (Laboratory grade)
 Eyepiece : WF10× widefield high plane type.
 Objective : Parfocal standard achromatic set, AC-4×, AC-10×, AC-40× and AC-100× oil.
 SM Series (Research grade)
 Eyepiece : WF10× H.H. widefield high plane and high eye point type with eye guard.
 Objective : Parfocal senior micro achromatic set, SM-4×, SM-10×, SM-40× and SM-100× oil,
 (Please refer optical performance table)

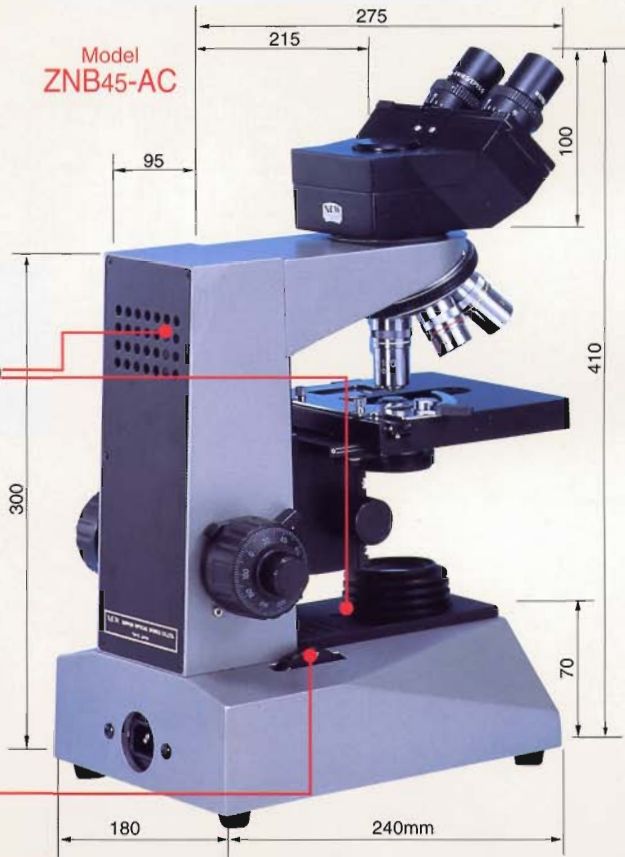
COOLING DEVICE (For both ZN/ZS interchangeable)

Designed of convectional radiation system, the heat generated by the light source can be carried away through many holes at the upper part of the stand.



LIGHT SOURCE SWITCH (For both ZN/ZS interchangeable)

Provided with single switch system, it is operative continuously for on-off and for light intensity control.



REVOLVING NOSEPIECE (interchangeable)

Precision ball bearing type quint click-stop.



MECHANICAL STAGE (For both ZN/ZS interchangeable)

Large double square type, 140mm positioned coaxial right-hand scale × 70mm with each vernier scale (upon request, left hand control stage clip can hold two slides sim



ATTACHABLE PLANO/CONCAVE MIRROR (For both ZN/ZS interchangeable)

To be replaced with electrical light source at where and when electric power can not be available by the removal of lamp house of illuminator base.



ILLUMINATOR BASE (For ZN Model)

Built-in 6V/20W halogen lamp and transformer for variable light intensity.



(For both ZN/ZS Model

Increased brightness in
using high quality prism,
microscopy drawing.



(For both ZN/ZS

multiple nosepiece with



interchangeable)
140mm, with low
control knob, movable 50mm
to read out 0.1mm,
(knob can be supplied),
simultaneously.

SUBSTAGE CONDENSER, ST-C
(For both ZN/ZS interchangeable)

Two lens Abbe type, N.A.1.25 with
centering screws, iris diaphragm and swing
out/in filter holder, focusable with rack
and pinion motion to up and down 20 mm.



BINOCLULAR HEAD ZB-30 (For ZS Model)

30° inclined 360° rotatable, rotating type interpupillary
distance adjustment from 55mm to 75mm, diopter adjustment
ring on left eyepiece tube, increased brightness in the field of view
and decreased the difference of the brightness of the field of
view between of right and left eyepiece with multi-coating
high quality prism.



TRINOCULAR HEAD ZT-30 (For ZS Model)

With same optical design and specifications with binocular
head, but with vertical photo tube for the microphotography
and also interchangeable with C-mount tube to be connected with
TV camera for the TV monitoring. For the microphotography and TV
monitoring the light path can be changed by the lever to be divided into
20% for binocular and 80% for photo tube or C-mount tube.



OPTICAL COMPONENTS (FOR ZS Model)

MP Series (Research Grade)
Eyepiece : WF10×/H.H.widefield high plane and high eye point type,
with eye guard,
Objective : Parfocal micro planachromatic set,
MP-4 × ,MP-10× , MP-40× and MP-100× oil
(please refer optical performance table)



Model
ZSB30-MP



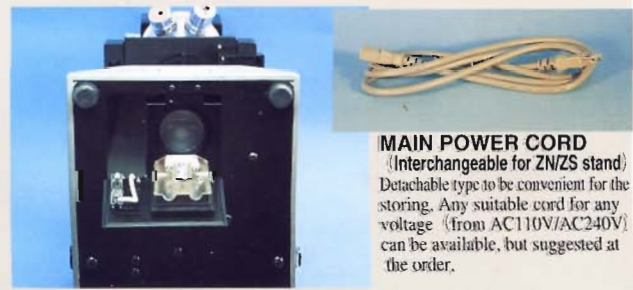
FOCUSING ADJUSTMENT (For ZN/ZS interchangeable)

Coaxial coarse and fine focusing adjustment system with focus stopper
to prevent the damage of slides or objectives, coarse focusing range 27mm
and fine focusing is operative in full range of coarse adjustment range, a rotation
of fine focusing adjustment is 0.2mm with graduation in each 0.002mm.



ILLUMINATOR BASE (For ZS Model)

Built-in 6V/30W halogen lamp with simple
Koehler illumination system with field
diaphragm and transformer for variable
light intensity.



MAIN POWER CORD

(Interchangeable for ZN/ZS stand)
Detachable type to be convenient for the
storing. Any suitable cord for any
voltage (from AC110V/AC240V)
can be available, but suggested at
the order.

ILLUMINATOR BASE (Common Futures for ZN/ZS stand)

- 1) Inspection and replacement of bulb and fuse can be done by
the opening of the base plate without any technical difficulties,
- 2) Inside of the illuminator base is designed to be effective
for cooling and radiation.

LINE UP OF OPTIONAL ACCESSORIES TO EXPAND THE AVAILABILITY OF ZN/ZS MODELS

OPTICAL PERFORMANCE TABLE



Standard Achromatic (AC series)

AC	N.A.	W.D.	REMARK
4×	0.10	15.8mm	
10×	0.25	4.2mm	
20×	0.40	3.3mm	Spring
40×	0.65	0.57mm	Spring
100×	1.25	0.13mm	Oil.Spring



Sensor Micro Achromatic (SM series)

SM	N.A.	W.D.	REMARK
4×	0.10	14.5mm	
10×	0.25	6.5mm	
20×	0.40	3.3mm	Spring
40×	0.65	0.6mm	Spring
100×	1.25	0.14mm	Oil.Spring



Micro Plan Achromatic (MP series)

MP	N.A.	W.D.	REMARK
2×	0.05	18.5mm	
4×	0.10	14.5mm	
10×	0.25	10.0mm	
40×	0.65	0.53mm	Spring
100×	1.25	0.17mm	Oil.Spring



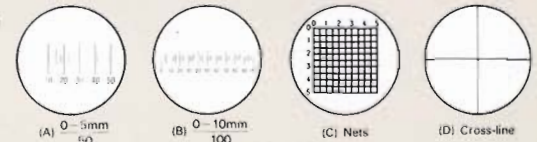
	FIELD NO.	EYE POINT	REMARK
W10×	18	15.5mm	
W10×H.H.	18	18.5mm	with eyeguard
EW10×	21	14.5mm	
W15×	13	11.6mm	
W20×	10	10.0mm	

No.188 : FOCUSABLE EYEPIECE
(Set in a micrometer chart NO.185).



M10×D F/NO.18
E/P 18.5mm

No.185 : EYEPIECE MICROMETER CHARTS, φ 19



No.186 : STAGE MICROMETER



No.191 : PHASE CONTRAST ATTACHMENT, NMP-Set

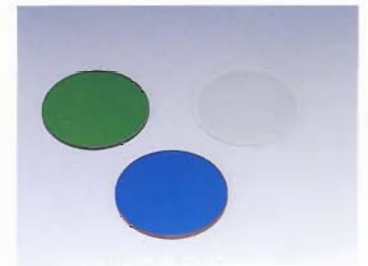
Contents/Phase, & Darkfield Condenser, NMP-C, with

two phase annulus for 10×, 20×, 40× and for 100×, with one dark field annuli. Centerring telescope, Phase objectives, 10×, (20×), 40× and 100×, (but 20× is Option) Green filter,



No.192 : POLARISING ATTACHMENT, ZPL

Contents/Analyser filter, ZPL-A, Polariser filter (sensitive color plate), ZPL-P



No.193 : CONDENSER FILTERS φ 31

No.193-B : Blue filter.
No.193-G : Green filter.
No.193-W : White (frost) filter,
No.193-H : Heat cut filter, φ 44



No.194-ST : PHOTOGRAPHY ATTACHMENT, NMP-ST

Contents/ST Adapter (without finder eyepiece), Shutter release, 35mm camera mount (suggest 35mm camera model/brand) P10× Photo eyepiece



No.194-RF : PHOTOGRAPHY ATTACHMENT, NMP-RF

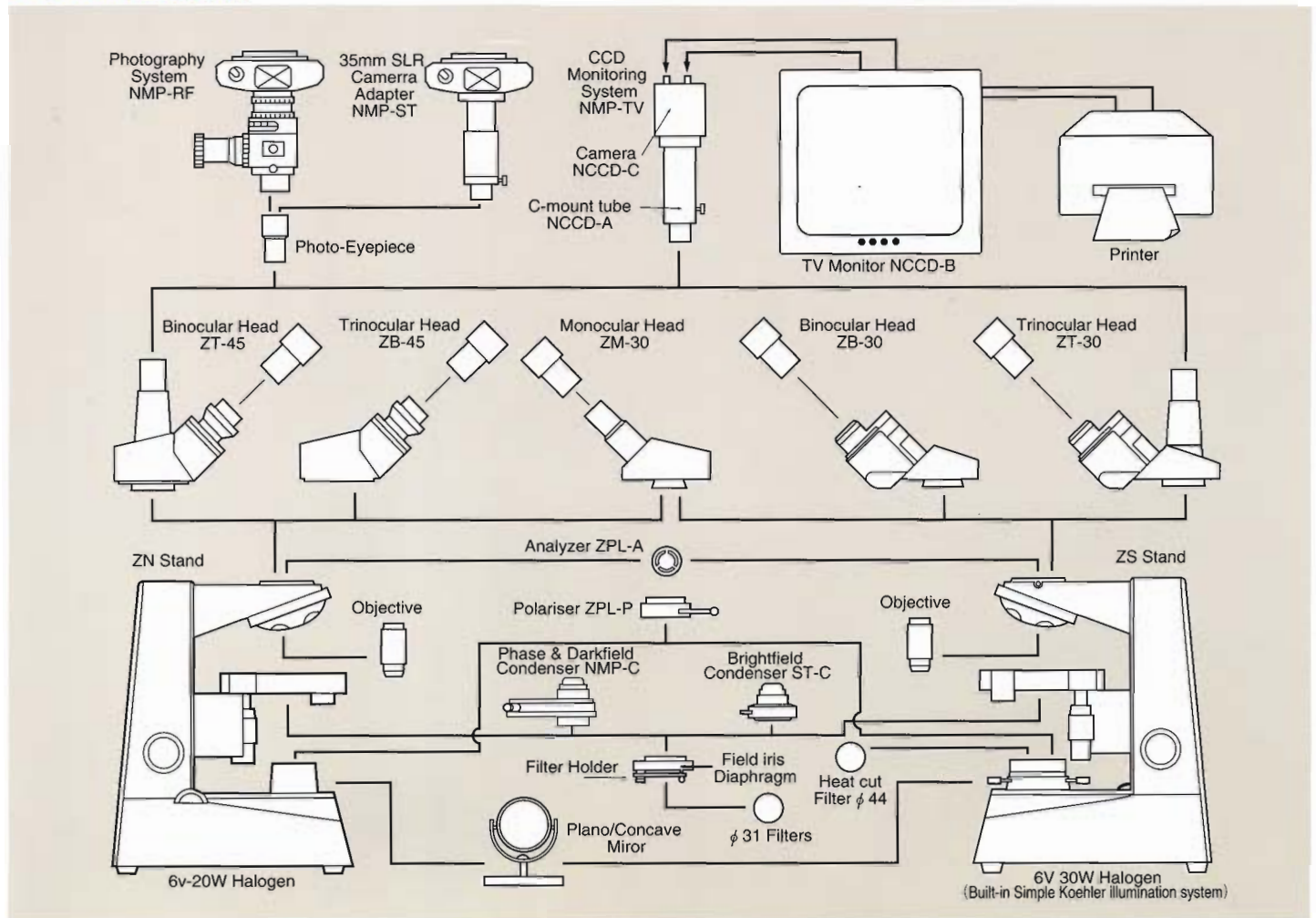
Contents/RF Adapter with finder eyepiece, 35mm SLR camera back. Shutter release, 35mm camera mount P10× photo eyepiece,



No.195 : TV MONITORING SYSTEM, NRM-TV

Contents/NCCD-C CCD Camera, NCCD-A C-mount tube with 0.5× relay lens, NCCD-E AC adapter, NCCD-M Coaxial video cable, NCCD-B Monitor, 14 inch,

SYSTEM DIAGRAM



COMBINATION UNITS		Model of Scope	ZNT45-AC	ZNB45-AC	ZNM-AC	ZNT45-SM	ZNB45-SM	ZNM-SM	ZST30-MP	ZSB30-MP	ZSM-MP
COMPONENT	MODEL	Standard Accesories	2 Bulbs, Power Cord, Blue Filter,								
STAND	ZS	6V30W-Halogen							●	●	●
	ZN	6V20W-Halogen	●	●	●	●	●	●			
HEAD	ZM-30	Monocular			●			●			●
	ZB-45	Binocular		●			●				
	ZT-45	Trinocular	●			●					
	ZB-30	Binocular								●	
	ZT-30	Trinocular							●		
EYEPIECE (PAIRED)	W10×	Wide Field	●	●	● 1pc						
	W10×/H-H	High E-Point with Eyequad				●	●	● 1pc	●	●	● 1pc
OBJECTIVE STANDARD ACHROMATIC (AC)	AC4×		●	●	●						
	AC10×		●	●	●						
	AC40×	Spring	●	●	●						
	AC100×	(Oil) Spring	●	●	●						
OBJECTIVE SENSORMICRO ACHROMATIC (SM)	SM4×					●	●	●			
	SM10×					●	●	●			
	SM40×	Spring				●	●	●			
	SM100×	(Oil) Spring				●	●	●			
OBJECTIVE MICRO · PLAN ACHROMATIC (MP)	MP4×								●	●	●
	MP10×								●	●	●
	MP40×	Spring							●	●	●
	MP100×	(Oil) Spring							●	●	●
WOODEN CASE		255×285×495(H)mm	●	●	●	●	●	●	●	●	