



The Eyes of Science

Accessories

Advanced Research Microscope Accessories

ECLIPSE 90*i* / 80*i*



ECLIPSE 80i

ECLIPSE 90i





Epi-fluorescence Accessories

The digital-imaging head and the universal epi-fluorescence illuminator incorporate Nikon's unique Noise Terminator to achieve fluorescence images with an unprecedentedly high signal-to-noise (S/N) ratio. The digital-imaging head comes in two types: the DIH-E features a motorized switching for the field diaphragm, optical path, epi-fl filter cube, excitation light shutter, analyzer and optical zoom, while the DIH-M has a motorized control specifically for the excitation light shutter.

- S/N ratio has been dramatically improved by directing stray light out of the optical path.
- Excitation wavelength can be continuously fine-tuned by adjusting the sliding distance of the optional Excitation Balancer.
- Six filter cubes can be accommodated, and they are easily exchanged.
- Filters or mirror in the filter cubes can be easily replaced to create the desired combination.
- Filter position labels glow in the dark for easy identification.
- Universally functional for darkfield, brightfield, Nomarski DIC and other applications using episcopic illumination in addition to epi-fluorescence microscopy.



■ Specific Accessories for D-H-E Motorized Digital Imaging Head (DIH-E)

1 D-DH-E Digital-Imaging Head E Main Body

2 Filter Cube Nameplates

3 Light Shielding Plate

4 Hg Lamphouse HMX-4B

5 Aperture Diaphragm

6 D-FB Excitation Balancer (optional)

7 ND Filters

8 C-FC Epi-fl Collector Lens

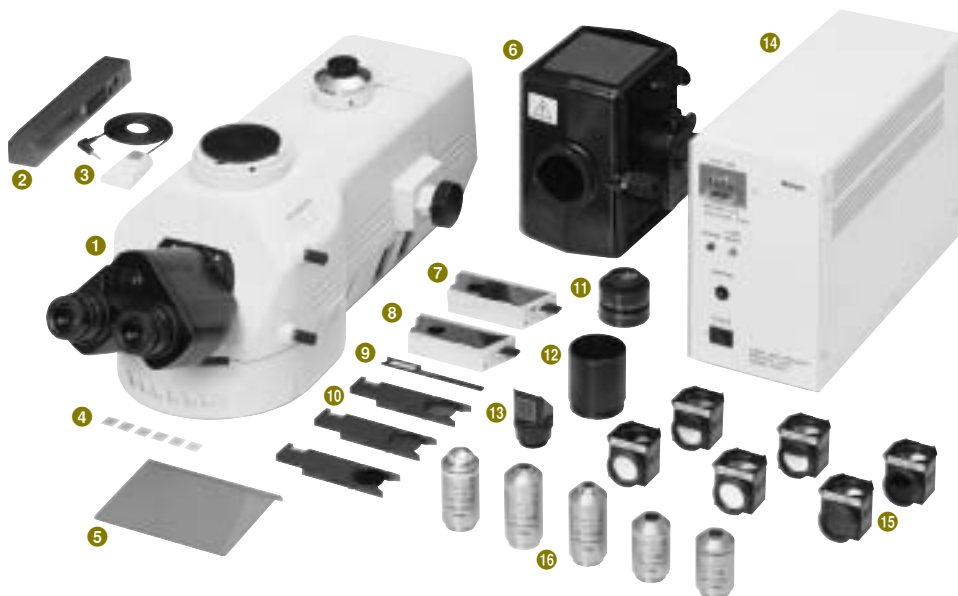
9 Light Shielding Tube

10 C-FC Centering Tool

11 C-SHG1 Power Supply for HG 100W

12 C-FL Epi-fl Filter Cubes

13 CFI Plan Fluor Objectives



■ Specific Accessories for D-H Manual Digital Imaging Head (DIH-M)

- | | |
|---|---------------------------------------|
| 1 D-DH Digital-Imaging Head M Main Body | 9 D-FB Excitation Balancer (optional) |
| 2 D-CB Connector Box | 10 ND Filters |
| 3 C-HS Hand Switch | 11 C-FC Epi-fl Collector Lens |
| 4 Filter Cube Nameplates | 12 Light Shielding Tube |
| 5 Light Shielding Plate | 13 C-FC Centering Tool |
| 6 Hg Lamphouse HMX-4B | 14 C-SHG1 Power Supply for HG 100W |
| 7 Aperture Diaphragm | 15 C-FL Epi-fl Filter Cubes |
| 8 Field Diaphragm | 16 CFI Plan Fluor Objectives |



■ Specific Accessories for d-FL Universal Epi-F luorescence Attachment

- | |
|--|
| 1 D-FL Universal Epi-fluorescence Attachment |
| 2 Filter Cube Nameplates |
| 3 Light Shielding Plate |
| 4 C-FC Epi-fl Collector Lens |
| 5 C-FC Centering Tool |
| 6 Hg Lamphouse HMX-4B |
| 7 C-SHG1 Power Supply for HG 100W |
| 8 CFI Plan Fluor Objectives |
| 9 C-FL Epi-fl Filter Cubes |



Epi-fluorescence Filters

Filter Characteristics

	Filters	Wavelengths	Characteristics	Applications
U V	UV-1A	EX 365/10 DM 400 BA 400	<ul style="list-style-type: none"> Narrow band pass – only 365nm (i line) of Mercury spectrum used Narrow band pass minimizes auto-fluorescence and photo-bleaching 	<ul style="list-style-type: none"> DAPI Hoechst 33258/33342 AMCA Cascade Blue® Autofluorescence
	UV-2A	EX 330-380 DM 400 BA 420	<ul style="list-style-type: none"> Standard filter block for UV 	
	UV-2B	EX 330-380 DM 400 BA 435	<ul style="list-style-type: none"> Darker background than UV-2A 	
	UV-2E/C (DAPI)	EX 340-380 DM 400 BA 435-485	<ul style="list-style-type: none"> For DAPI, cutting off FITC (green) and TRITC (red) Soft-coated type for high signal/noise Band-Pass Barrier Filter used to cut off green and red 	
V	V-2A	EX 380-420 DM 430 BA 450	<ul style="list-style-type: none"> Standard filter block for V 	<ul style="list-style-type: none"> Catecholamine Serotonin Tetracycline
B V	BV-1A	EX 435/10 EM 455 BA 470	<ul style="list-style-type: none"> Narrow band pass – only 435nm (g line) of Mercury spectrum used Narrow band pass minimizes auto-fluorescence and photo-bleaching 	<ul style="list-style-type: none"> Quinacrine Quinacrine Mustard (QM) Thioflavine S Acridine
	BV-2A	EX 400-440 DM 455 BA 470	<ul style="list-style-type: none"> Standard filter block for BV 	
B	B-1A	EX 470-490 DM 505 BA 520	<ul style="list-style-type: none"> Narrower excitation range than B-2A FITC+Counter-stain (TRITC, PI) 	<ul style="list-style-type: none"> FITC Acridine Orange Auramine O Coriphosphine O Bodipy® Fluo-3 DIO
	B-1E	EX 470-490 DM 505 BA 520-560	<ul style="list-style-type: none"> For FITC (green), cutting off Rhodamine red Band-Pass Barrier Filter used to cut off red 	
	B-2A	EX 450-490 DM 505 BA 520	<ul style="list-style-type: none"> Standard filter block for B For FITC + Counter-stain (TRITC, PI) 	
	B-2E/C (FITC)	EX 465-495 DM 505 BA 515-555	<ul style="list-style-type: none"> Soft coated type for high signal/noise For FITC (green), cutting off Rhodamine red Band-pass Barrier Filter used to cut off red 	
	B-3A	EX 420-490 DM 505 BA 520	<ul style="list-style-type: none"> Wide band pass – recommended for halogen illumination only 	
G	G-1B	EX 546/10 DM 575 BA 590	<ul style="list-style-type: none"> Narrow band pass – only 546nm (e line) of Mercury spectrum used Narrow band pass minimizes auto-fluorescence and photo-bleaching 	<ul style="list-style-type: none"> TRITC Rhodamine B200 Propidium iodide R-Phycoerythrin B-Phycoerythrin Dil Ethidium Bromide
	G-2A	EX 510-560 DM 575 BA 590	<ul style="list-style-type: none"> Standard filter block for G 	
	G-2B	EX 510-560 DM 575 BA 610	<ul style="list-style-type: none"> 610nm barrier provides darker background and deep red emission 	
	G-2E/C (TRITC)	EX 540/25 DM 565 BA 605/55	<ul style="list-style-type: none"> For TRITC (Rhodamine) Soft coated type for high signal/noise Band-Pass Barrier Filter used to cut off reds above 643nm 	
Y	Y-2E/C (Texas Red)	EX 540-580 DM 595 BA 600-660	<ul style="list-style-type: none"> For Texas Red® Soft coated type for high signal/noise Band-Pass Barrier Filter used to cut off reds above 660nm 	<ul style="list-style-type: none"> Texas Red®

Multi-Band Filters

Filters	Abbreviations	Applications
Dual	F-R	FITC Rhodamine
	F-T	FITC Texas Red
	D-F	DAPI FITC

Filters	Abbreviations	Applications
Triple	D-F-R	DAPI FITC Rhodamine
	D-F-T	DAPI FITC Texas Red

Filters for Fluorescent Protein

Models	Wavelengths	Characteristics	Applications
GFP-L	EX480/40, DM505, BA510	GFP long-pass type	GFP
GFP-B	EX480/40, DM505, BA535/50	GFP band-pass type	GFP

High Quality Filters

Each filter/mirror has a very sharp rising edge at the corresponding wavelength, minimizing signal crossover.

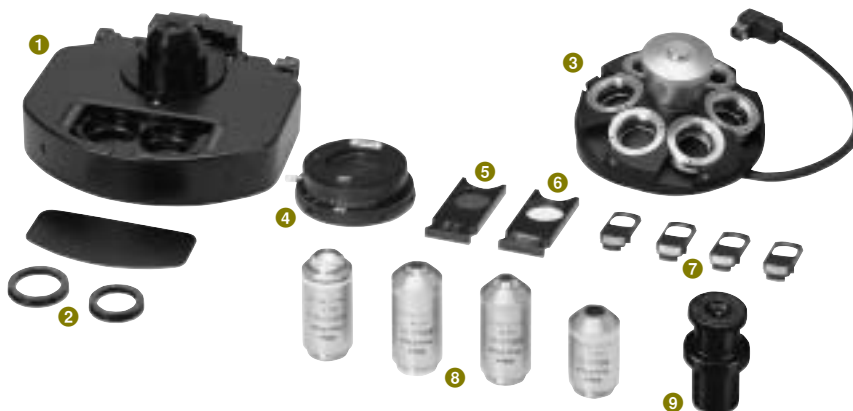
Filters	Wavelengths
CFP HQ	EX420-445, DM450, BA460-510
GFP HQ	EX455-485, DM495, BA500-545
YFP HQ	EX490-500, DM510, BA520-560

Nomarski DIC Accessories

The new DIC system produces well-balanced images with outstanding contrast and resolution to produce crisp and clear images with perfectly even brightness, even during low-magnification observations.

- Two types of DIC modules (dry) are enough to cover observations from 10X to 100X.
- DIC sliders can be chosen from Standard, High-contrast, and High-resolution types, depending on the specimen.
- Shear direction of DIC images can be adjusted* on a rotatable stage.

*Rotatable stage cannot be mounted on the 80i mechanical-stage model.



■ Specific Accessories for 90i System

- 1 D-CUD-E Motorized Universal Condenser Dry
- 2 D-C DIC Module Dry
- 3 D-ND6-E Motorized Sextuple DIC Nosepiece
- 4 D-DP DIC Rotatable Polarizer
- 5 D-DA DIC Analyzer
- 6 D-LP Lambda Plate
- 7 D-C DIC Sliders
- 8 CFI Plan Fluor/CFI Plan Apo Objectives
- 9 C-CT Centering Telescope

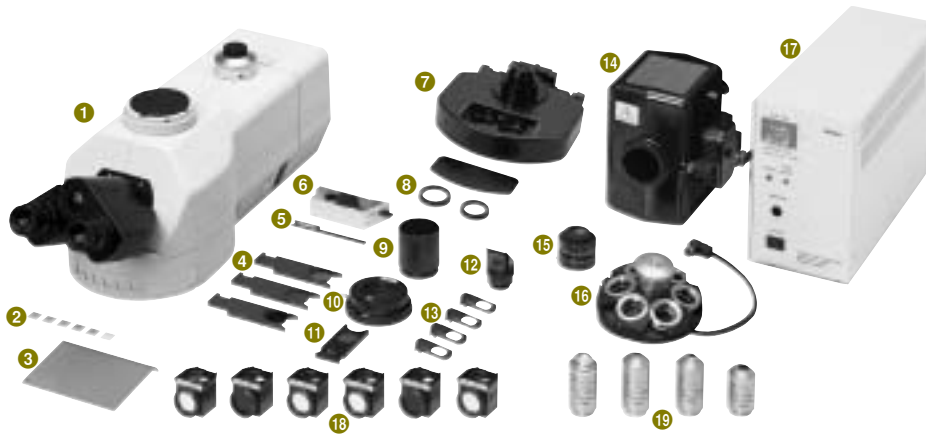


■ Specific Accessories for 80i System

- 1 D-CUD Universal Condenser Dry
- 2 D-C DIC Module Dry
- 3 D-ND6 Sextuple DIC Nosepiece
- 4 D-NID6 Intelligent Sextuple DIC Nosepiece
- 5 D-DP DIC Rotatable Polarizer
- 6 D-DA DIC Analyzer
- 7 D-LP Lambda Plate
- 8 D-C DIC Sliders
- 9 CFI Plan Fluor/CFI Plan Apo Objectives
- 10 C-CT Centering Telescope

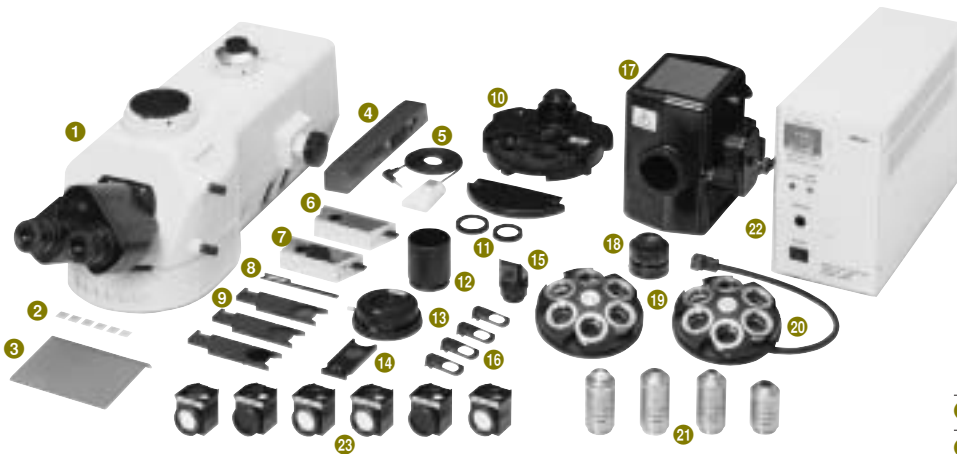
Epi-fluorescence/Nomarski DIC Accessories

This method allows a DIC image to be overlaid with an epi-fluorescence image within a single view field. This makes the position identification of a fluorescence specimen easier and more accurate. In configuration with the DIH-E motorized digital-imaging head and 90i, the system can automatically optimize settings for epi-fl/DIC observations at the click of a mouse via the connected PC.



■ Specific Motorized Accessories

- 1 D-DH-E Digital-imaging Head E Main Body
- 2 Filter Cube Nameplates
- 3 Light Shielding Plate
- 4 ND Filters
- 5 D-FB Excitation Balancer (optional)
- 6 Aperture Diaphragm
- 7 D-CUD-E Motorized Universal Condenser Dry
- 8 D-C DIC Module (Dry)
- 9 Light Shielding Tube
- 10 D-DP DIC Rotatable Polalyzer
- 11 D-DA DIC Analyzer
- 12 C-FC Centering Tool
- 13 D-C DIC Slider
- 14 Hg Lamphouse HMX-4B
- 15 C-FC Epi-fl Collector Lens
- 16 D-ND6-E Motorized Sextuple DIC Nosepiece
- 17 C-SHG1 Power Supply for HG 100W
- 18 C-FL Epi-fl Filter Cubes
- 19 CFI Plan Fluor/CFI Plan Apo Objectives



■ Specific Manual Accessories

- 1 D-DH Digital-imaging Head M Main Body
- 2 Filter Cube Nameplates
- 3 Light Shielding Plate
- 4 D-CB Connector Box
- 5 C-HS Hand Switch
- 6 Aperture Diaphragm
- 7 Field Diaphragm
- 8 D-FB Excitation Balancer (optional)
- 9 ND Filters
- 10 D-CUD Universal Condenser Dry

- 11 D-C DIC Module (Dry)
- 12 Light Shielding Tube
- 13 D-DP DIC Rotatable Polalyzer
- 14 D-DA DIC Analyzer
- 15 C-FC Centering Tool
- 16 D-C DIC Slider
- 17 Hg Lamphouse HMX-4B
- 18 C-FC Epi-fl Collector Lens
- 19 D-ND6 Sextuple DIC Nosepiece
- 20 D-NID6 Intelligent Sextuple DIC Nosepiece
- 21 CFI Plan Fluor/CFI Plan Apo Objectives
- 22 C-SHG1 Power Supply for HG100W
- 23 C-FL Epi-fl Filter Cubes

Phase Contrast Accessories (80i)

These accessories produce well-defined high contrast images with neutral background coloration regardless of the magnification range. The CFI Plan Fluor DLL objectives can be universally used for phase contrast, epi-fluorescence, brightfield, as well as DIC applications. The CFI Achromat ADL objectives clearly visualize the minute structure of thick phase objects by minimizing halos.

*For phase contrast applications on the 80i rotatable mechanical stage model, a universal condenser must be used.



■ Specific Accessories for Rotatable Mechanical Stage Model

- 1 D-CUD Universal Condenser (Dry)
- 2 D-C PH Module
- 3 CFI Plan Fluor DLL Objectives
- 4 C-CT Centering Telescope



■ Specific Accessories for Mechanical Stage Model

- 1 C-C Phase Contrast Condenser
- 2 CFI Plan Fluor DLL Objectives
- 3 Filter, 45mm GIF
- 4 C-CT Centering Telescope

Phase Contrast

Darkfield Accessories

These dedicated darkfield accessories allow clear observation of blood or the minute structure of flagella. Dry- and oil-type condensers are available. The expander lens is used to obtain illumination with greater brightness. It is also possible to perform darkfield microscopy using a universal condenser or phase contrast condenser.



■ Specific Accessories

- 1 C-CEL Expander Lens
- 2 C-C Darkfield Condenser (Dry)
- 3 C-C Darkfield Condenser (Oil)

Darkfield

Simple Polarizing Accessories

Ideal for observing birefringent samples such as collagen, amyloids and crystals. Operation is as simple as inserting a polarizer over the field lens and an analyzer in the arm slot. The field number has been increased to 25.



■ Specific Accessories

- 1 C-SP Simple Polarizer
- 2 C-ISA Intermediate Tube w/Simple Analyzer

Simple Polarizing

Sensitive Color Polarizing Accessories

Enables gout and pseudo-gout tests easily.



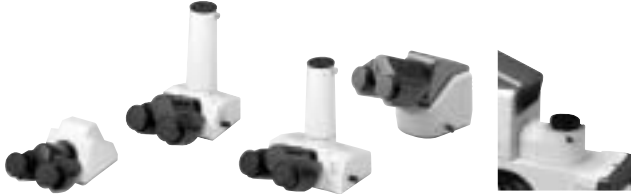
■ Specific Accessories

- 1 C-TP Polarizer with First-order Red Tint Plate
- 2 C-IA Intermediate Tube with Analyzer

Sensitive Color Polarizing

Other Accessories

Eyepiece Tubes



Name	Beam Split Ratio	Field Number	ISO Photo Tube
Binocular Tube B	Observation 100%	22	
Trinocular Tube FUW	Observation 100% / Photo 100%	22/25	Attachable
Trinocular Tube TUW	Observation 100% / Photo 100% / Observation 20%, Photo 80%	22/25	Attachable
Ergonomic Binocular Tube	Observation 100% / Observation 50%, Photo 50% (with DSC port)	22	
DSC Port (for Ergo Tube)	With C-mount 0.7X lens		

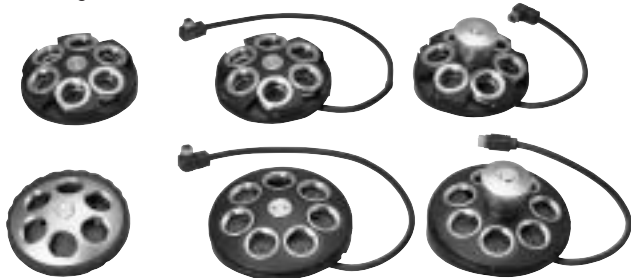
Eyepiece Lenses



Name (Magnification)	Field Number	Reticule
CFI 10X	22	
CFI 10XM	22	Photomask
CFI 12.5X	16	
CFI 15X	14.5	
CFI UW 10X	25	
CFI UW 10XM	25	Photomask

Nosepieces

The DIC-type nosepiece allows researchers to individually mount DIC sliders for each objective. The intelligent-type nosepiece allows objective information to be recorded with the image when it is captured with a Digital Sight-series digital camera. Two motorized types are available for the 90i, according to use.



C-N6	Sextuple Nosepiece
C-ND6	Sextuple DIC Nosepiece
D-NID6	Intelligent Sextuple DIC Nosepiece
D-NI7	Intelligent Septuple Nosepiece
D-ND6-E	Motorized Sextuple DIC Nosepiece (90i)
D-N7-E	Motorized Septuple Nosepiece (90i)

Stages

The image can be rotated and the polarizing direction adjusted on the rotatable stage. The specimen can be moved in the XY direction on the motorized stage.



C-SR	Mechanical Stage (for 80i mechanical stage)
C-SRR	Rotatable Mechanical Stage (for 90i/80i rotatable mechanical stage)
D-S-E	Motorized XY stage (90i only)

Specimen holders available separately.

Specimen Holders

2-slide holders and a single-slide holder enabling the quick exchange of the specimen with one hand are available.



Condensers



Type	N.A.	W.D. (mm)	Objective Mag. (F.O.V. 22)
Abbe Condenser	0.9	1.9	4-100X
Achromat Condenser	0.85	4.2	4-100X
Achromat Swing-out Condenser 1-100X	0.8/0.12	3.2	1-100X
Achromat Aplanat Condenser	1.40	1.6	10-100X
LWD Achromat Condenser	0.65	10.2	4-40X
Low Power Condenser	0.15	10.2	1-4X
Darkfield Condenser (Dry)	0.8-0.95	4	10-40X
Darkfield Condenser (Oil)	1.2-1.43	1.5	20-100X
Phase Contrast Condenser*1	0.9	1.9	10-100X
Universal Condenser (Dry)	0.9/0.13	2.3	2-100X
DIC Condenser (Oil)	1.4	1.6	10-100X
Motorized Universal Condenser (Dry)*2	0.9/0.13	2.3	2-100X

*1 Cannot be mounted on the 90i and 80i rotatable mechanical stage models. *2 90i only.

CCTV Adapters

2.5X, 4X relay lenses are ideal for video enhanced contrast (VEC) applications. Use 0.35X, 0.45X and 0.7X relay lenses for 1/3-, 1/2-, 2/3-inch CCD cameras, respectively. 0.9 to 2.2X zoom relay lenses are also available.



Ergo Controller (90i only)

The Ergo Controller allows focus adjustments, stage movements and objective lens changeovers to be performed in front of a PC monitor as if operating the actual microscope.



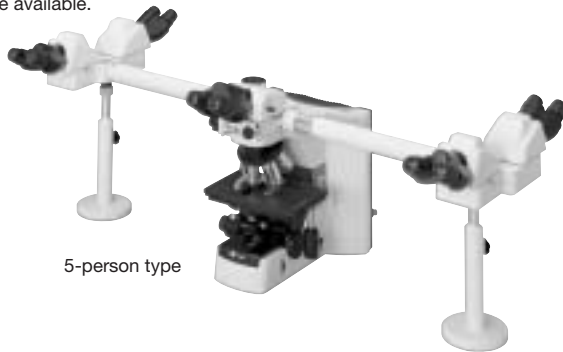
Motorized ND Filter Unit (90i only)

The Motorized ND Filter Unit automatically selects the optimum filter type after a change of the objective.



Teaching Heads

Various types from 2-person (side by side or face-to-face) to 10-person types are available.



Drawing Tube

The drawing tube allows both the image of a specimen and the drawing to be seen through the eyepieces. A dedicated adapter is necessary to attach it.



Double port

The double port enables the use of one CCTV camera and one digital camera, or two digital cameras simultaneously.



Magnification module

The turret system allows the intermediate magnification to be changed to 1X, 1.25X, 1.5X or 2X.



FX-III series photomicrographic equipment

The FX-III series utilizes a direct-projection system with a swing-out prism for fast exposure setting and accurate metering.

U-III: 0.1% and 1% spot exposure, and 35% integrated-average measurement modes

H-III: 1% spot and 35% integrated-average measurement modes

P-III: Manual exposure model



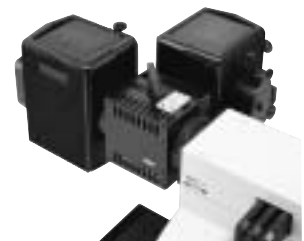
Quadrocular Adapter

Two CCTV cameras or one CCTV camera and a digital camera can be attached to the trinocular eyepiece tube while maintaining the same eye level.



Double-lamphouse Adapter

The double-lamphouse adapter allows two different light sources to be simultaneously attached to the microscope, eliminating the need to change the lamphouse and carry out time-consuming centering procedures.





CFI Objectives

Type	Use	Name	N.A.	W.D. (mm)	Cover-glass Thickness	
Achromat	Brightfield (CFI)	4X	0.10	30.00	-	
		10X	0.25	7.00	-	
		LWD 20X	0.40	3.90	0.17	
		40X	0.65	0.65	0.17	
		LWD 40XC	0.55	2.7-1.7	0-2.0	
		60X	0.80	0.30	0.17	
		100XH	1.25	0.23	0.17	
		100XH(iris)	0.5-1.25	0.23	0.17	
	Phase Contrast (CFI)	DL 10X	0.25	7.00	-	
		LWD DL 20X	0.40	3.90	0.17	
		LWD DL 20XF	0.40	3.10	1.2	
		DL 40X	0.65	0.65	0.17	
		LWD DL 40XC	0.55	2.7-1.7	0-2.0	
		DL 100XH	1.25	0.23	0.17	
		BM 10XA	0.25	6.10	-	
	New Phase Contrast (CFI)	ADL 10X	0.25	6.20	1.2	
		LWD ADL 20XF	0.40	3.10	1.2	
		LWD ADL 40XF	0.55	2.10	1.2	
		LWD ADL 40XC	0.55	2.7-1.7	0-2.0	
	Polarizing (CFI)	P 4X	0.10	30.00	-	
		P 10X	0.25	7.00	-	
		LWD P 20X	0.40	3.90	0.17	
		P 40X	0.65	0.65	0.17	
		P 100XH	1.25	0.23	0.17	
	Plan Achromat	Brightfield (CFI Plan)	UW 1X	0.04	3.20	-
			UW 2X	0.06	7.50	-
			4X	0.10	30.00	-
			10X	0.25	10.50	-
20X			0.40	1.20	0.17	
40X			0.65	0.56	0.17	
50XH			0.90	0.35	-	
100XH			1.25	0.20	0.17	
No Cover (CFI Plan)		NCG 40X	0.65	0.48	0	
		NCG 100X	0.90	0.26	0	
Phase Contrast (CFI Plan)		DL 10X	0.25	10.50	-	
		DL 20X	0.40	1.20	0.17	
		DL 40X	0.65	0.56	0.17	
		DL 100XH	1.25	0.20	0.17	
Fluor		Epi-fl (CFI Fluor)	10XW	0.30	2.00	0
			20XW	0.50	2.00	0
			40XW	0.80	2.00	0
	60XW		1.00	2.00	0	
	Super Fluor		Epi-fl (CFI S Fluor)	4X	0.20	15.5
10X		0.50		1.20	0.17	
20X		0.75		1.00	0.17	
40X		0.90		0.30	0.11-0.23	
40XH		1.30		0.22	0.17	
100XH(iris)		0.5-1.3		0.20	0.17	

Type	Use	Name	N.A.	W.D. (mm)	Cover-glass Thickness
Plan Fluor	Epi-fl (CFI Plan Fluor)	4X	0.13	17.10	-
		10X	0.30	16.00	0.17
		20X	0.50	2.10	0.17
		20XMi (Multi-immersion)	0.75	0.35	0.17
		40X	0.75	0.72	0.17
		40XH	1.30	0.20	0.17
		60X	0.85	0.30	0.11-0.23
		60XSH (iris)	0.5-1.25	0.22	0.17
		100X	0.90	0.30	0.14-0.20
		100XH	1.30	0.2	0.17
		100XH(iris)	0.5-1.3	0.2	0.17
	Phase Contrast (CFI Plan Fluor)	DL 4X	0.13	16.40	1.2
		DL 10X	0.30	15.20	1.2
		DLL 10X	0.30	16.00	-
		DLL 20X	0.50	2.10	0.17
		DLL 40X	0.75	0.72	0.17
		DLL 100XH	1.30	0.20	0.17
Plan Apochromat	Brightfield (CFI Plan Apo)	2X	0.10	8.50	-
		4X	0.20	15.70	-
		10X	0.45	4.00	0.17
		20X	0.75	1.00	0.17
		40X	0.95	0.14	0.11-0.23
		40XH	1.00	0.16	0.17
		60X	0.95	0.15	0.11-0.23
		60XH	1.40	0.21	0.17
		VC 60XH	1.40	0.13	0.17
		VC 60XWI	1.20	0.27	0.15-0.18
		VC 100XH	1.40	0.13	0.17
	NCG 100XH	1.40	0.17	0	
	Evanescent TIRF (CFI Plan Apo)	TIRF 60XH	1.45	0.13	0.10-0.22
		TIRF 100XH	1.45	0.13	0.17
	Phase Contrast (CFI Plan Apo)	DM 20X	0.75	1.00	0.17
		DM 40X	0.95	0.14	0.11-0.23
		DM 40XH	1.00	0.16	0.17
DM 60X		0.95	0.15	0.11-0.23	
DM 60XH		1.40	0.13	0.17	
DM 100XH		1.40	0.13	0.17	

Eclipse 90i/80i Specifications

		90i	80i
Main Body	Optical system	CFI60 infinity optical system	
	Base		Mechanical stage model / Rotatable stage model
	Illumination	Precentered 12V100W halogen transmitted illumination Built-in fly-eye lens Built-in NCB11/ ND8/ ND32 filters (detachable) & diffuser (not detachable) Preset switch Motorized field diaphragm External power supply Motorized ND filter unit for light intensity control available as option	Precentered 12V100W halogen transmitted illumination Built-in fly-eye lens Built-in NCB11/ ND8/ ND32 filters (detachable) & diffuser (not detachable) Preset switch Built-in power supply
	Focusing	Motorized coaxial coarse/fine/super-fine focusing Built-in linear encoder, resolution : 0.05um Focusing stroke : 27mm Escape function as refocusing mechanism Auto Link Focus	Manual coaxial coarse/fine focusing Focusing stroke : 27mm Coarse : 14mm/rotation, Fine : 0.1mm/rotation Minimum reading : 1um Refocusing mechanism with focus clamp Coarse motion torque adjustable
Eyepiece Tube (Light distribution)	Y-TB Binocular Tube F.O.V. 22 Y-TF Trinocular Tube F UW F.O.V. 22/25mm (Eyepiece/Port : 100/0, 0/100) Y-TT Trinocular Tube T UW F.O.V. 22/25mm (Eyepiece/Port : 100/0, 20/80, 0/100) C-TE Ergonomic Binocular Tube F.O.V. 22mm inclination angle : 10-30 tube extension up to 40mm (when C-TEP DSC port is attached: Eyepiece/Port 100/0, 50/50) D-DH Digital Imaging Head / D-DH-E Motorized Digital Imaging Head F.O.V. 22/25mm (Eyepiece/Front Port/Rear Port : 100/0/0, 0/100/0, 0/0/100*) * A 30/0/70 type is also available for DIH-M.		
Eyepiece Lens (F.O.V.)	10X (22mm), 10X M photomask (25mm), 12.5X (16mm), 15X (14.5), UW10X (25mm), UW 10X M photomask (25mm)		
Nosepiece	D-N7-E Motorized Septuple Nosepiece D-ND6-E Motorized Sextuple DIC Nosepiece D-NI7 Intelligent Septuple Nosepiece D-NID6 Intelligent Sextuple DIC Nosepiece C-N Sextuple Nosepiece, D-ND6 Sextuple DIC Nosepiece	D-NI7 Intelligent Septuple Nosepiece D-NID6 Intelligent Sextuple DIC Nosepiece C-N Sextuple Nosepiece D-ND6 Sextuple DIC Nosepiece	
Stage	C-SRR Rotatable Rectangular Mechanical Stage (Ball bearing mechanism) Cross travel 78(X) x 54(Y) mm, with calibrations, stage handle height and torque adjustable, rackless D-S-E Motorized XY Stage Cross travel 78(X) x 54(Y) mm, Repeatability : ±10µm C-HC1/HL2 Specimen Holders for 1 slide/2 slides	C-SRR Rotatable Rectangular Mechanical Stage (Centerable, rotation angle 220°) C-SR Rectangular Mechanical Stage Cross travel 78(X) x 54(Y) mm, with calibrations, Stay-in -position stage handle height and torque adjustable, rackless C-HC1/HL2 Specimen Holders for 1 slide/2 slides	
Condenser	D-CUD-E Motorized Universal Condenser Dry (Motorized 7-position turret and aperture diaphragm), D-CUD Universal Dry, D-CUO DIC Oil, C-C Abbe, C-C Achromat, C-C Achromat Swing-out 1-100X, C-C Low Power, C-C Achromat/Aplanat, Darkfield (Dry/Oil), LWD Achromat	D-CUD Universal Dry, D-CUO DIC Oil, C-C Abbe, C-C Achromat, C-C Achromat Swing-out 1-100X, C-C Low Power, C-C Achromat/Aplanat, C-C Phase Contrast, Darkfield (Dry/Oil), LWD Achromat	
Power Consumption (max.)	100-230V, 2.8A/210W	100-230V, 2.4A/170W	
Weight (approx.)	18.2 kg (standard trinocular set)		

Digital-imaging Heads, Universal Epi-fluorescence Illuminator Specifications

	DIH-E	DIH-M	Universal Epi-fluorescence Illuminator
Applications	Epi-fluorescence, Epi-brightfield, Epi-darkfield, Epi-DIC, Epi-simple polarizing, Confocal		
Light distribution	Observation/front port/rear port: 100/0/0, 0/100/0, 0/0/100	100/0/0, 0/100/0, 0/0/100 * * A 30/0/70 type is also available.	Depends on eyepiece tube used
	Motorized switching	Manual switching	
Optical output ports	Font port: 1X, diameter ϕ 52mm Rear port: optical zoom 0.8-2.0X (continuous), zoom ratio 2.5 : 1, C-mount		Not available
	Motorized	Manual	
Inclination angle	25°		Depends on eyepiece tube used
F.O.V.	22, 25mm		
Filter turret	6 filter cubes mountable		
	Motorized	Manual	
Hi S/N Noise Terminator mechanism	Available		
Excitation light balancer	Available		
Aperture diaphragm	Centerable, detachable, diameter ϕ 1-9mm (manual)		
Field diaphragm	Centerable, not detachable, diameter ϕ 1-9mm		
	Motorized	Manual	
ND filters	ND4, ND8, ND16 (manual)		
Excitation light shutter	Motorized		Manual
Analyzer	Motorized	Manual (with slot)	
Polarizer	Manual (with slot)		
Light source	Mercury, xenon, halogen (centerable)		
External connection	USB, C1 interlock, external connection connector		Not available
Status-check function	Available (data can be recorded with image captured by Digital Sight digital camera)		Not available
Compatible microscopes	90i, 80i		90i, 80i, E600, E600FN, ME600L, L150

Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. January 2005.
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