



The Eyes of Science

Accessories

Clinical & Laboratory Microscope Accessories

ECLIPSE 50*i* / 55*i*



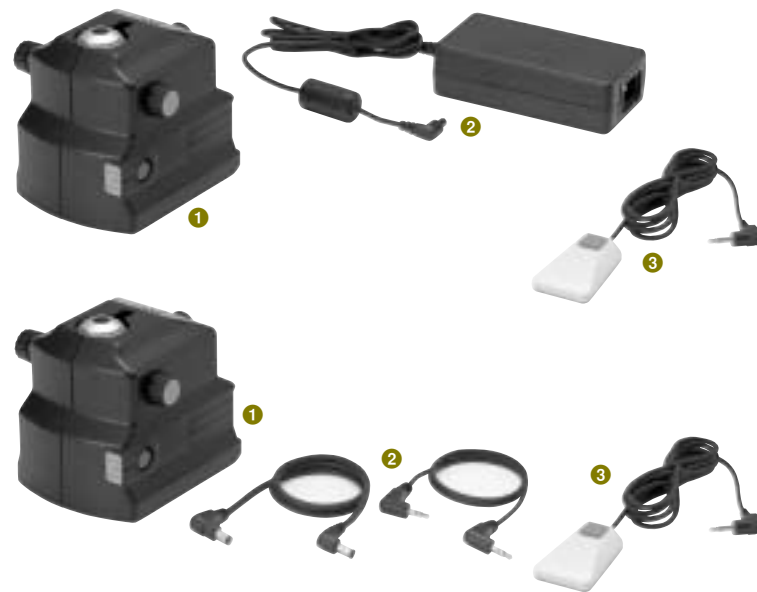
CFI60



Cytodiagnosis Accessories

This compact Ergo-View cytodagnosis unit can be easily retrofitted to the 50i or 55i microscope, to facilitate easier and more comfortable cytology examinations.

- Motorized magnification switchover between 10X and 40X at the flip of a switch.
- Rapid and quiet magnification changeover with no vibration. This eliminates eye strain due to image blur.
- Excellent image parfocality minimizes focus deviation, eliminating the need for focus adjustment each time the magnification is changed.
- In configuration with the ECLIPSE 55i that adopts LED illumination, light intensity is automatically adjusted following the magnification change. This ensures comfortable observations with constant brightness.
- Easy object marking while observing the specimen through eyepieces.
- Marking ink is a cartridge type and can be easily exchanged.



Specific Accessories for ECLIPSE 50i

- 1 J-CY Cytodiagnostic Unit
- 2 DS AC Adapter
- 3 C-HS Hand Switch

Specific Accessories for ECLIPSE 55i

- 1 J-CY Cytodiagnostic Unit
- 2 Cable Set for Cytodiagnostic Unit
- 3 C-HS Hand Switch

Phase Contrast Accessories (ECLIPSE 50i)

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.



Specific Accessories

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

Darkfield Accessories (ECLIPSE 50i)

These 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 phase contrast condenser.



Specific Accessories

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

Simple Polarizing Accessories (ECLIPSE 50i)

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

Sensitive Color Polarizing Accessories (ECLIPSE 50i)

Enables easy gout and pseudo-gout tests.



Specific Accessories

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

Epi-fluorescence Accessories

The epi-fl illuminator is a compact and easy-to-use turret-type exclusively developed for the ECLIPSE 50i and 55i.

- Four 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.



Specific Accessories

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



Fluorescence Filter Cubes

	Filters	Wavelengths	Characteristics	Applications
UV	UV-2A	EX 330-380 DM 400 BA 420	•Standard filter block for UV	<ul style="list-style-type: none"> •DAPI •Hoechst 33258/33342 •AMCA •Cascade Blue® •Autofluorescence
	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 	
	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 	
	UV-2B	EX 330-380 DM 400 BA 435	•Darker background than UV-2A	
V	V-2A	EX 380-420 DM 430 BA 450	•Standard filter block for V	<ul style="list-style-type: none"> •Catecholamine •Serotonin •Tetracycline
BV	BV-2A	EX 400-440 DM 455 BA 470	•Standard filter block for BV	<ul style="list-style-type: none"> •Quinacrine •Quinacrine Mustard (QM) •Thioflavine S •Acridine Orange
	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 	
B	B-3A	EX 420-490 DM 505 BA 520	•Wide band pass – recommended for halogen illumination only	<ul style="list-style-type: none"> •FITC •Acridine Orange •Auramine O •Coriphosphine O •Bodipy® •Fluo-3 •DIO
	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-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) 	
	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 	
	G	G-2A	EX 510-560 DM 575 BA 590	
G	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 	<ul style="list-style-type: none"> •TRITC •Rhodamine B200 •Propidium iodide •R-Phycoerythrin •B-Phycoerythrin •Dil •Ethidium Bromide
	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 	
	G-2B	EX 510-560 DM 575 BA 610	•610nm barrier provides darker background and deep red emission	
	Y	Y-2E/C (Texas Red)	EX 540-580 DM 595 BA 600-660	

Fluorescence Reagents and Dedicated Filters* for Fluorescence Protein

Filters/Reagents	Wavelengths
GFP-L	EX480/40, DM505, BA510
GFP-B	EX480/40, DM505, BA535/50
BFP	EX380/30, DM420, BA460/50
CFP	EX436/20, DM455, BA480/40
YFP	EX500/20, DM515, BA520
Cy 3	EX535/50, DM565, BA610/75
Cy 5	EX620/60, DM660, BA700/75
Cy 7	EX710/75, DM750, BA810/90

Multi-Band Filters*

Filters	Abbreviations	Reagents
Dual	F-R	FITC/Rhodamine
	F-T	FITC/Texas Red
	D-F	DAPI/FITC
Triple	D-F-R	DAPI/FITC/Rhodamine
	D-F-T	DAPI/FITC/Texas Red

Filters are consumables. Filters marked with an asterisk (*), in particular, come with special coatings, so these should be replaced in the shortest possible period of time.
Other filter combinations are available. Please ask your local Nikon distributor for a complete list of filters or inquire about special custom filter combinations possible.



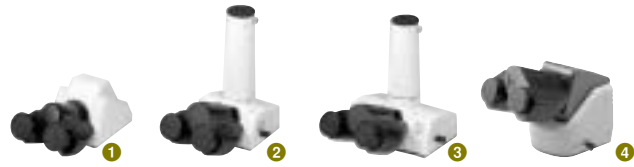
CFI Objectives

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	
	New Phase Contrast (CFI)	BM 10XA	0.25	6.10	-	
		ADL 10X	0.25	6.20	1.2	
		LWD ADL 20XF	0.40	3.10	1.2	
	Polarizing (CFI)	LWD ADL 40XF	0.55	2.10	1.2	
		LWD ADL 40XC	0.55	2.7-1.7	0-2.0	
		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	
	Plan Achromat	Brightfield (CFI Plan)	P 100XH	1.25	0.23	0.17
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	
No Cover (CFI Plan)		40X	0.65	0.56	0.17	
		50XH	0.90	0.35	-	
		100XH	1.25	0.20	0.17	
		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		
Fluor	Epi-fl (CFI Fluor)	DL 100XH	1.25	0.20	0.17	
		10XW	0.30	2.00	0	
		20XW	0.50	2.00	0	
		40XW	0.80	2.00	0	
	Epi-fl (CFI S Fluor)	60XW	1.00	2.00	0	
		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	

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
	Phase Contrast (CFI Plan Fluor)	100XH (iris)	0.5-1.3	0.2	0.17
		DL 4X	0.13	16.40	1.2
		DL 10X	0.30	15.20	1.2
		DL 20X	0.30	16.00	-
Brightfield (CFI Plan Apo)	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	

Others

Eyepiece Tubes



Name	Beam Split Ratio	Field Number	ISO Photo Tube
1 Binocular Tube B	Observation 100%	22	
2 Trinocular Tube FUW	Observation 100% / Photo 100%	22/25	Attachable
3 Trinocular Tube TUW	Observation 100% / Photo 100% / Observation 20%, Photo 80%	22/25	Attachable
4 Ergonomic Binocular Tube	Observation 100% / Observation 50%, Photo 50% (with DSC port)	22	

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

Condensers



Type	N.A.	W.D. (mm)	Magnifications
Abbe Condenser	0.9	1.9	4-100X
Achromat Condenser	0.8	4.2	4-100X
Achromat Swing-out Condenser 2-100X	0.9/0.22	1.8	2-100X
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	0.13	10.2	1-4X
Darkfield Condenser (Dry)*	0.8-0.95	4	20-40X
Darkfield Condenser (Oil)*	1.2-1.43	1.5	20-100X
Phase Contrast Condenser*	0.9	1.9	10-100X

*For ECLIPSE 50i

CCTV Adapters

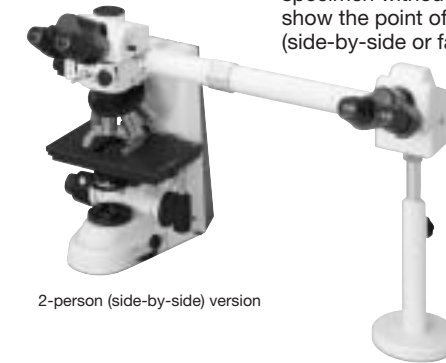


2.5X, 4X relay lenses are ideal for video enhanced contrast (VEC) applications. Use 0.35X, 0.45X and 0.7X relay lenses for 1/3-, 1/2-, 2/3-inch CCD cameras, respectively. 0.9 to 2.2X zoom relay lenses are also available.

Teaching Heads (ECLIPSE 50i)



2-person (face-to-face) version



2-person (side-by-side) version

Teaching heads facilitate simultaneous viewing of the same specimen without compromising image brightness. A pointer to show the point of interest is provided. Available from 2-person (side-by-side or face-to-face) to 5-person types.

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.

Eye-level Riser



Can raise the eye-point height in 25mm increments, up to 100mm maximum depending on the configuration.

Double Port



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

FX-III Series Photomicrographic Equipment



H-III

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

Magnification Module



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

Specimen Holders

Two types of 2-slide holders (opening to the right or left) and a single-slide holder enabling the quick exchange of the specimen with one hand are available.

Specifications

Main body	50i	55i
Magnification	10–1500X	
Optical system	CFI60 Infinity Optical System	
Coarse/fine focusing	Fine: 0.1mm per rotation, Coarse: 13.8mm per rotation, Minimum reading: 1 micron Coarse motion torque adjustable, Refocusing function (with stopper)	
Illumination	6V-30W halogen lamp 100-240V (worldwide voltage)	White LED array AC adapter (100-240V) or optional lithium battery (7.4V)
Built-in filter	ND8	LA60 color balance filter
Eyepiece tube	Binocular tube B (for F.O.V. 22mm) Trinocular tube "F" UW (for F.O.V. 22mm/25mm, observation/photo: 100/0, 0/100) Trinocular tube "T" UW (for F.O.V. 22mm/25mm, observation/photo: 100/0, 20/80, 0/100) Ergonomic binocular tube (for F.O.V. 22mm, inclination:10-30°, extension: 40mm); DSC port: 100/0, 50/50 (optional)	
Eyepiece lens	10X (F.O.V.: 22mm), 10X M photo mask (F.O.V.: 25mm), 12.5X (F.O.V.: 16mm), 15X (F.O.V.: 14.5mm), UW 10X (F.O.V.: 25mm), UW 10X M photo mask (F.O.V.: 25mm)	
Nosepiece	Sextuple nosepiece Ergo-View cytodiagnostic unit (Motorized changeover 10X to 40X with hand switch, Stamp type marking)	
	—	Automatic illumination adjustment with Ergo-View
Stage	Super-hard Alumite coated surface, Stay-in-position stage handle, Stage handle height and tension adjustable Rectangular 159mm X 243mm surface stage, 78mm X 54mm cross travel (x-y movement) 1-slide or 2-slide specimen holder available (option)	
Condenser focusing stroke	27mm	
Intermediate accessories	Epi-fluorescence illuminator (4 filter positions), Magnification module, Eye-level riser, Double port	
	Teaching head	—
Observation method	Brightfield, Epi-fluorescence	
	Darkfield, Phase contrast, Simple polarizing	—

Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. December 2003. ©2003 NIKON CORPORATION



	WARNING	TO ENSURE CORRECT USAGE, READ THE CORRESPONDING MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT.
--	----------------	--

Company names and product names appearing in this brochure are their registered trademarks or trademarks.

NIKON INSTRUMENTS CO., LTD.

Parale Mitsui Bldg., 8, Higashida-cho, Kawasaki-ku, Kawasaki, Kanagawa 210-0005, Japan
phone: +81-44-223-2167 fax: +81-44-223-2182
www.nikon-instruments.jp/eng/

NIKON INSTRUMENTS (SHANGHAI) CO., LTD.

CHINA phone: +86-21-5058-5055 fax: +86-21-5058-5060

NIKON SINGAPORE PTE LTD

SINGAPORE phone: +65-6559-3618 fax: +65-6559-3668

NIKON MALAYSIA SDN. BHD.

MALAYSIA phone: +60-3-78763887 fax: +60-3-78763387

NIKON INSTRUMENTS EUROPE B.V.

P.O. Box 222, 1170 AE Badhoevedorp, The Netherlands
phone: +31-20-44-96-222 fax: +31-20-44-96-298
www.nikon-instruments.com/

NIKON FRANCE S.A.

FRANCE phone: +33-1-45-16-45-16 fax: +33-1-45-16-00-33

NIKON GMBH

GERMANY phone: +49-211-9414-0 fax: +49-211-9414-322

NIKON INSTRUMENTS S.p.A.

ITALY phone: +39-55-3009601 fax: +39-55-300993

NIKON AG

SWITZERLAND phone: +41-43-277-2860 fax: +41-43-277-2861

NIKON UK LTD.

UNITED KINGDOM phone: +44-20-8541-4440 fax: +44-20-8541-4584

NIKON INSTRUMENTS INC.

1300 Walt Whitman Road, Melville, N.Y. 11747-3064, U.S.A.
phone: +1-631-547-8500; +1-800-52-NIKON (within the U.S.A. only) fax: +1-631-547-0306
www.nikonusa.com/

NIKON CANADA INC.

CANADA phone: +1-905-625-9910 fax: +1-905-625-0103



NIKON CORPORATION

Fuji Bldg., 2-3, Marunouchi 3-chome, Chiyoda-ku, Tokyo 100-8331, Japan
www.nikon.com/