

LMC2P Upright Microscope



Version 1.0

INTRODUCTION

LAXCO has been a leading provider of high precision, cutting edge optical instruments and microscopes for over 30 years. Our products span a complete range of applications including education, clinical, life science research, and industrial. Our commitment to engineering excellence, breakthrough innovations, and cost effective solutions, makes us one of the most reliable suppliers in the industry. Our products come with a heritage of technical strength, manufacturing discipline, and a prominent reputation of advanced engineering. We currently hold over 15 patents for lighting, design, and technology and our designs incorporate numerous innovative features, address issues others may overlook, and come with a strong industry-proven reputation. Product development is based in Washington State with electrical, mechanical, and optical engineers on site. Recently Laxco was awarded the Vizient Innovative Technology Award for their SeBa line.

Introducing the new enhanced LMC2P microscope designed as a high quality biological microscope, ideal for basic research and classroom applications. With infinity color correction optical system and Laxco's Luminance Improved Gradient Heightened Technology™ (LIGHT)™ system, the LMC2P creates illumination, and bright images at any magnification. The user-friendly design, expanded base for stability, simple and convenient operation, allowing students to easily master operation. Similarly, same as with all Laxco microscopes, the LMC2P maintains excellent reliability and durability, and is suitable for high-intensity use in the education market.

KEY FEATURES

Infinity Optical System

Spherical and chromatic corrected infinity optical system providing excellent optical quality

Ergonomic Design

Enhanced frame size adding stability with focus, stage, and lamp intensity controls placed low on the microscope stand to provide optimal ergonomics.

Gemel Binocular and Trinocular Head

Expanded interpupillary distance 47mm-75mm and 30° inclined observation tubes, which meets the needs of more users.

LED Illumination

Long life LED illumination in both transmitted and fluorescence modes

Even Illumination Technology (EvenLIT™)

EvenLIT™ provides even illumination across the entire field.

Mechanical Stage

Low-position, X/Y axis mechanical stage with travel limit, allows for precise sample movement.

Focus Control

Rack and pinion focusing mechanism for smooth focusing control with fine and coarse control.

Koehler illumination

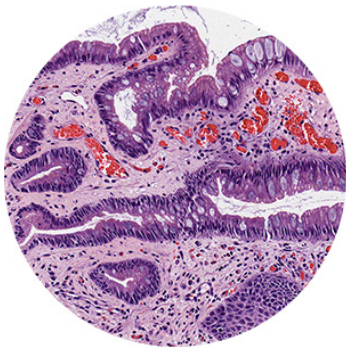
Full Koehler illumination with field and iris diaphragm.

User Friendly Stand

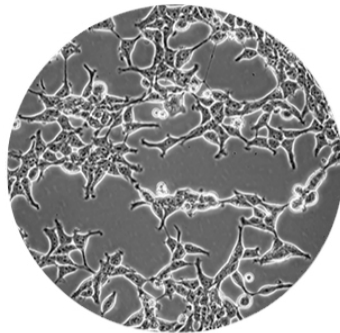
Built in carrying handle for easy transportation and incorporates a smooth curved design eliminating all sharp edges.



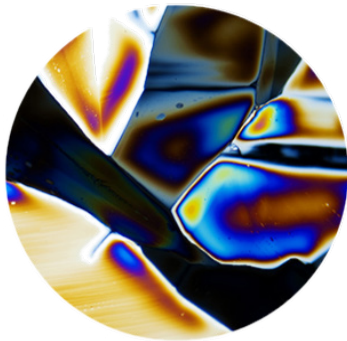
CONTRAST METHODS



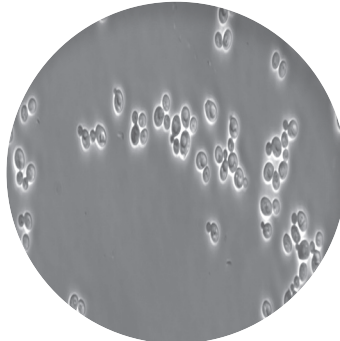
Brightfield



Phase Contrast



Simple Polarized Light



Darkfield

Brightfield

Ideal for stained samples, to observe cell structures and analyze plant slices.

Phase Contrast

View specimens with high transparency, such as cells, bacteria and other small, transparent objects in biological specimens.

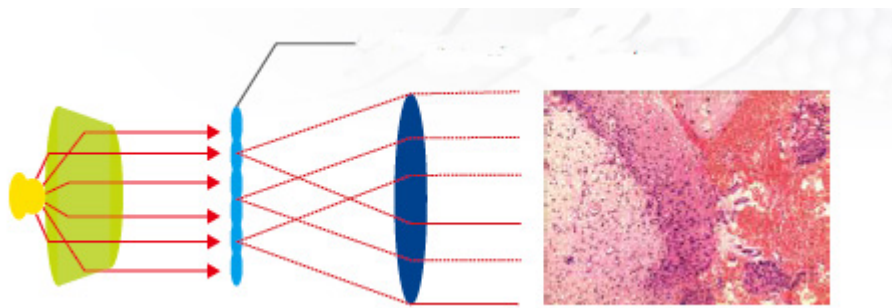
Simple Polarization

Utilized to judge substances with birefringence characteristics such as animals, plant cells and humoral crystals.

Darkfield Contrast

Popular method for making an unstained object visible. Center light is block creating an oblique type of illumination creating a “negative” type image.

EvenLIT™ TECHNOLOGY



The Laxco LMC2P innovatively incorporates Even Illumination Technology™ (EvenLIT™) system into the optical path. This system improves the contrast rate and uniformity at the specimen surface, even at the edge of the field of view. This is accomplished by placing the gradient in the optical path at the bottom focal point of the condenser. Bright, uniform background brightness is achieved for all objective magnification producing a more ideal imaging effect while reducing eye fatigue and improving the observation experience.

INFINITY OPTICAL SYSTEM

The Laxco LMC2P offers a superior infinity optical system including high eye point, wide field plan eyepieces and Plan Achromat Infinity Corrected Objectives. These are available for traditional brightfield observation or in a positive phase contrast series. The enhanced interpupillary distance creates an ideal microscope for everyone in the classroom through those doing basic research. If higher quality objectives are required, Laxco has a full line of Plan Fluorite and Plan Apochromatic available.



Plan Achromat Infinity Corrected Objectives



Plan Achromat Phase

FULL KOEHLER ILLUMINATION



Full Koehler illumination is available on the LMC2P with a fully functional field diaphragm, focusable sub-stage and centerable condenser. This allows the user to optimize the image quality by assuring the optical path is fully aligned in Koehler. Even illumination is critical and coupling the LIGHT™ system with proper Koehler alignment meets or exceeds illuminations expectations.

CORD STORAGE

The LMC2P incorporates a built-in storage area on the back, making full use of the available space in the stand. It's designed to enable storage of the power cord eliminating the bulky cord wrap on the back of the scope reducing the overall footprint. The attached cover keeps your desktop look clean and organized.



STANDARD CONFIGURATIONS

	LMC2P-BF1	LMC2P-BF2	LMC2P-PH1	LMC2P-PH2
OPTICAL SYSTEM	Infinity corrected	Infinity corrected	Infinity corrected	Infinity corrected
HEAD	30° inclined, gemel binocular head, interpupillary distance 47mm-75mm	30° inclined, gemel trinocular head, interpupillary distance 47mm-75mm, light splitting ratio 80:20	30° inclined, gemel binocular head, interpupillary distance 47mm-75mm	30° inclined, gemel trinocular head, interpupillary distance 47mm-75mm, light splitting ratio 80:20
OBJECTIVES	Infinity plan achromatic objective (4X, 10X, 40X, 100X)	Infinity plan achromatic objective (4X, 10X, 40X, 100X)	Infinity plan positive phase contrast objectives (4x, 10x, 40x, 100x)	Infinity plan positive phase contrast objectives (4x, 10x, 40x, 100x)
EYEPIECES	High eye point wide field plan eyepiece PL 10X/20mm, with adjustable diopter	High eye point wide field plan eyepiece PL 10X/20mm, with adjustable diopter	High eye point wide field plan eyepiece PL 10X/20mm, with adjustable diopter	High eye point wide field plan eyepiece PL 10X/20mm, with adjustable diopter
FIELD OF VIEW	20mm	20mm	20mm	20mm
FOCUS	Coarse and Fine - low position coaxial focusing mechanism, coarse range: 25mm, fine precision: 0.002mm, with tension adjustment and upper limit	Coarse and Fine - low position coaxial focusing mechanism, coarse range: 25mm, fine precision: 0.002mm, with tension adjustment and upper limit	Coarse and Fine - low position coaxial focusing mechanism, coarse range: 25mm, fine precision: 0.002mm, with tension adjustment and upper limit	Coarse and Fine - low position coaxial focusing mechanism, coarse range: 25mm, fine precision: 0.002mm, with tension adjustment and upper limit
KOEHLER	Full	Full	Full	Full
CONDENSER	N.A.1.25 LIGHT™ condenser with plug-in phase contrast and dark field accessories interface, condenser preset center	N.A.1.25 LIGHT™ condenser with plug-in phase contrast and dark field accessories interface, condenser preset center	N.A.1.25 LIGHT™ condenser with plug-in phase contrast and dark field accessories interface, condenser preset center	N.A.1.25 LIGHT™ condenser with plug-in phase contrast and dark field accessories interface, condenser preset center
ILLUMINATION	3w LED	3w LED	3w LED	3w LED
STAGE	150mm X 162mm double-layer composite mechanical moving stage, double slice clamps, moving range: 76mm x 50mm; accuracy: 0.1mm	150mm X 162mm double-layer composite mechanical moving stage, double slice clamps, moving range: 76mm x 50mm; accuracy: 0.1mm	150mm X 162mm double-layer composite mechanical moving stage, double slice clamps, moving range: 76mm x 50mm; accuracy: 0.1mm	150mm X 162mm double-layer composite mechanical moving stage, double slice clamps, moving range: 76mm x 50mm; accuracy: 0.1mm
NOSEPIECE	Reversed quadruple	Reversed quadruple	Reversed quadruple	Reversed quadruple

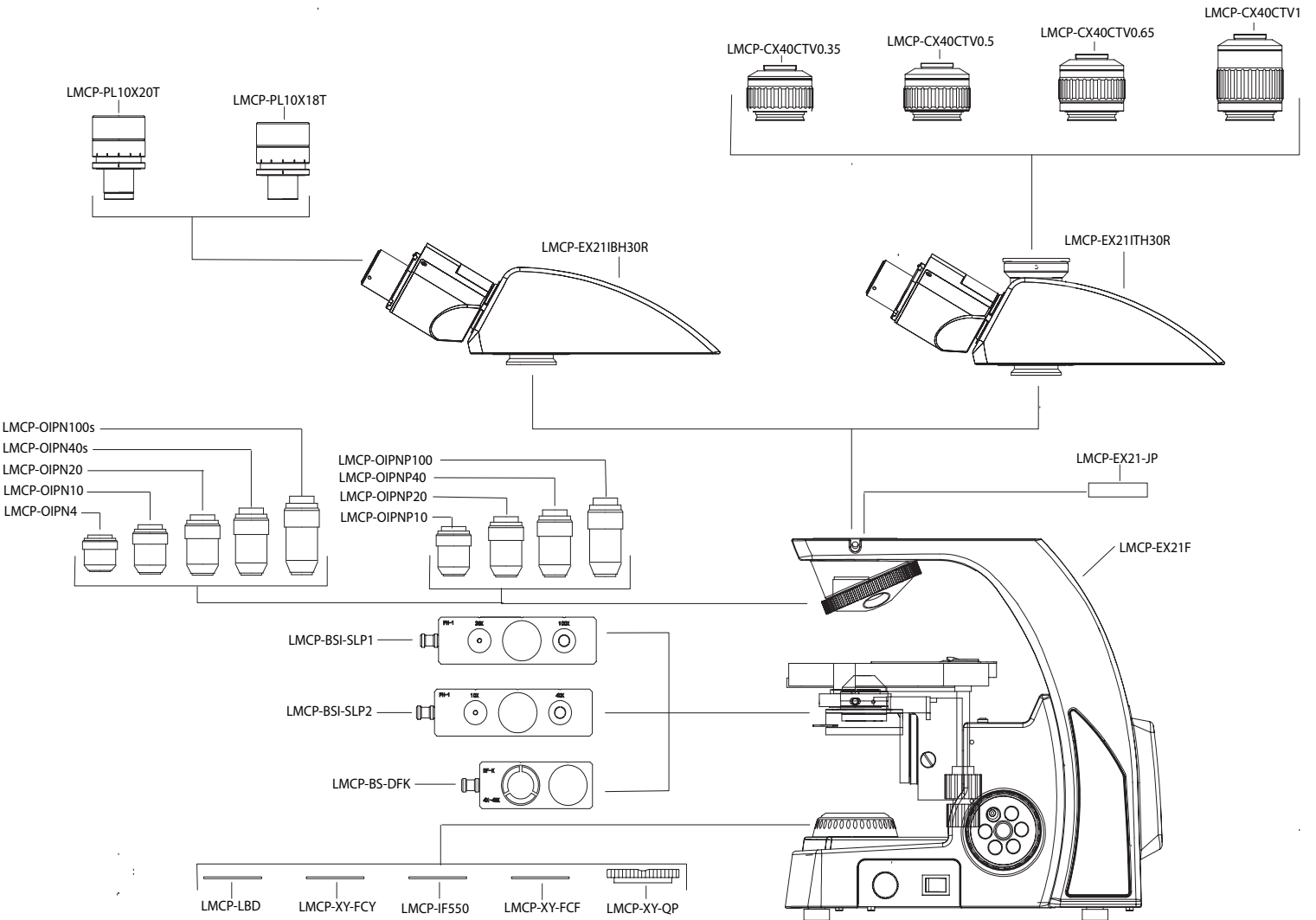


ACCESSORIES

CONTRAST ACCESSORIES	LMCP-BS-DFK	Darkfield Slider for 4X-40X objective
	LMCP-BSI-SLP1	Phase Slider for 10X, 40X phase contrast objectives
	LMCP-BSI-SLP2	Phase Slider for 20X, 100X phase contrast objectives
	LMCP-XY-QP	Polarizer for LMC2P
	LMCP-EX21-JP	Analyser for LMC2P
OBJECTIVES	LMCP-OIPN4	Plan Achromatic Objective 4X / 0.10 (Infinity)
	LMCP-OIPN10	Plan Achromatic Objective 10X / 0.25 (Infinity)
	LMCP-OIPN20	Plan Achromatic Objective 20X / 0.50 (Infinity)
	LMCP-OIPN40s	Plan Achromatic Objective 40X / 0.65 (Infinity)
	LMCP-OIP50OIL	Plan Achromatic Objective 50x/0.95 oil (Infinity)
	LMCP-OIPN60s	Plan Achromatic Objective 60X/0.85 (Infinity)
	LMCP-OIPN100s	Plan Achromatic Objective 100X/1.25 (Infinity)
	LMCP-OIPNP10	Plan Phase Objective 10X/0.25 (Infinity)
	LMCP-OIPNP20	Plan Phase Objective 20X/0.40 (Infinity)
	LMCP-OIPNP40	Plan phase contrast objective 40X/0.65 (Infinity)
	LMCP-OIPNP100	Plan Phase Objective 100X/1.25 (Infinity)
FILTERS	LMCP-XY-FCB	Blue filter (45mm diameter)
	LMCP-XY-FCY	Yellow filter (45mm diameter)
	LMCP-IF550	Green filter (45mm diameter)
	LMCP-LBD	LBD Light Balancing Color Temperature Filter (45mm diameter)
	LMCP-XY-FCF	Neutral filter (45mm diameter)
EYEPIECES	LMCP-PL10X18T	High eye point wide field flat field eyepieces PL10X /18mm
	LMCP-PL10X18TR	High eye point wide field flat field eyepieces PL10X /18mm, with micrometer
	LMCP-PL10X20TR	High eye point wide field flat field eyepieces PL10X / 20mm, with micrometer
	LMCP-PL10X20P	High eye point wide field flat field eyepieces PL10X / 20mm, with pointer
	LMCP-PL10X20-1	High eye point wide field flat field eyepieces PL10X / 20mm with 1 mm grid, 10x10
	LMCP-PL15X16	High eyepoint plan eyepiece, PL15X16mm
DIGITAL / DUAL	PMCP-HDB6200I	Binocular Dual View Education Head, infinity
	ZP-PMD4-1	Digital Camera Head for LMC2P, Infinity
	ZP-PMDV-1	Video LCD Head for LMC2P, Infinity
CAMERAS / C-MOUNTS	DC2-C	3MP Camera, with .35x C-Mount adapter for MZ & ABR head
	SeBaCam5C	5.1 MP Color camera
	SeBaCam10C	10 MP CMOS Color camera
	DC6-TM1-031788	Truechrome Metric HDMI camera, 1080p, 6MP, w/ 11.6" 1080p IPS Pro HDMI Monitor, SD card, HDMI cable, USB cable, power adapter, bracket, mouse and software.
	LMCP-CX40CTV0.35	0.35X CTV with C mount, focus adjustable
	LMCP-CX40CTV0.5	0.5X CTV with C mount, focus adjustable
	LMCP-CX40CTV0.65	0.65XCTV with C mount, focus adjustable
	LMCP-CX40CTV1	1XCTV with C mount, focus adjustable
STAGE MICROMETERS / RETICLES	MP-ERL-P	Particle Analysis G57 IMA/USP Reticle
	MP-ERL-2	Reticle, Linear, 10x1
	MP-ERG-3	Reticle Grid, 10x10 1mm sq
	LMC-PRT-30263	Miller Disc Reticule
	LMCP-XY-P-MR1	High precision micrometer, 0.01mm
	MP-SM100-C	NIST Stage Micrometer, 1mm, 0.01mm Div

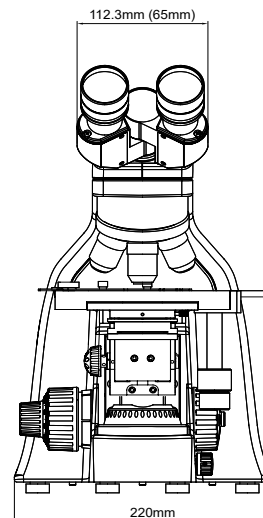
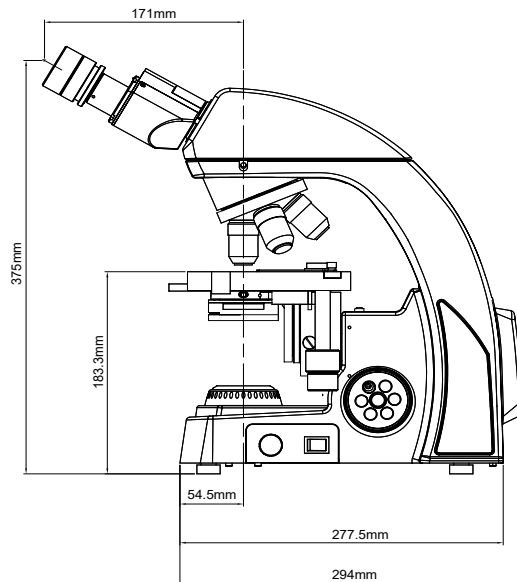
NOTE - All Laxco microscopes are manufactured in conformance to current antifungal standards. The observation tube is resistant to bacteria and fungi that may be present in the environmental setting of the microscope.

CONFIGURATION CHART



DIMENSIONS

LMC2P Dimensions
Weight - 14 pounds



A Microscope for Everyone



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