

LMC2 PRO Upright Microscope



Version 2

Brochure

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. A major goal of Koehler Illumination to evenly illuminate the back focal plane of the objective for maximum resolution and evenly illuminated background and this is now accomplished with EvenLIT™.



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.

User Friendly Stand

Built in carrying handle for easy transportation and incorporates a smooth curved design

CONTRAST METHODS

Brightfield

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

Phase Contrast

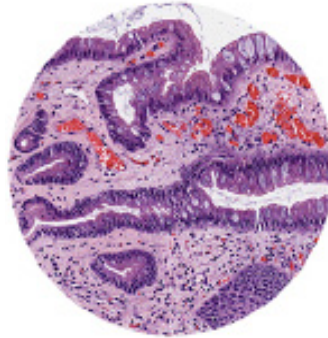
View specimens with high transparency, such as cells, bacteria and other small, transparent objects in biological specimens.

Simple Polarization

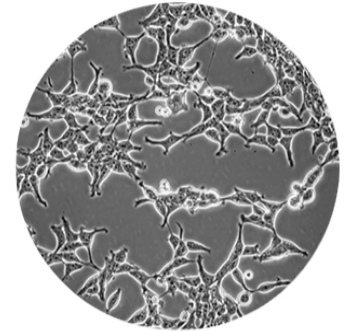
Utilized to judge substances with birefringence characteristics such as animals, plant cells and humoral crystals.

Darkfield Contrast

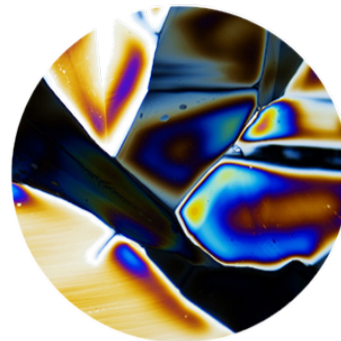
Popular method for making an unstained object visible. Center light is blocked creating an oblique type of illumination creating a "negative" type image.



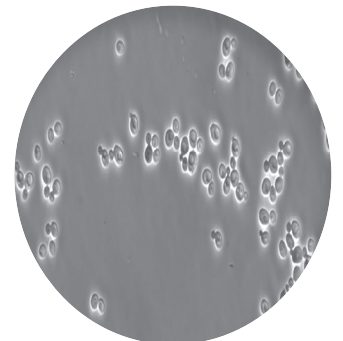
Brightfield



Phase Contrast

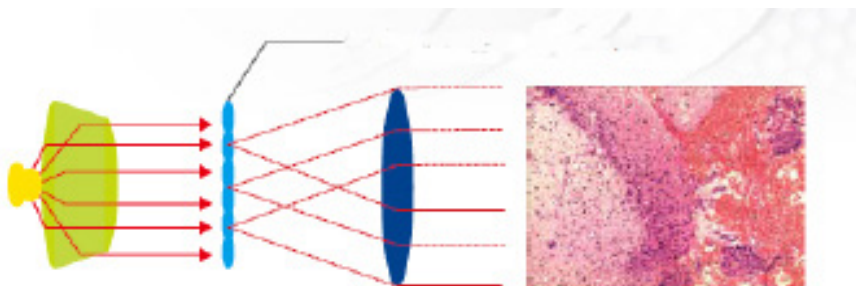


Simple Polarized Light



Darkfield

EvenLIT™ TECHNOLOGY



The Laxco LMC2P innovatively incorporates Even Illumination Technology™ (EvenLIT™) system into the optical path. The major goal of Koehler is to illuminate evenly the back focal plane of the objective for maximum resolution and evenly illuminated background. EvenLIT™ accomplishes this without the usual adjust the condenser by improving the contrast rate and uniformity at the specimen surface, even at the outer edge of the field of view. EvenLIT™ accomplishes this by placing a specially designed 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



Plan Achromat Phase Infinity Corrected Objectives



Plan Achromat Infinity Corrected Objectives

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.

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

| | 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 (10x, 20x, 40x, 100x) | Infinity plan positive phase contrast objectives (10x, 20x, 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 |
| 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 |

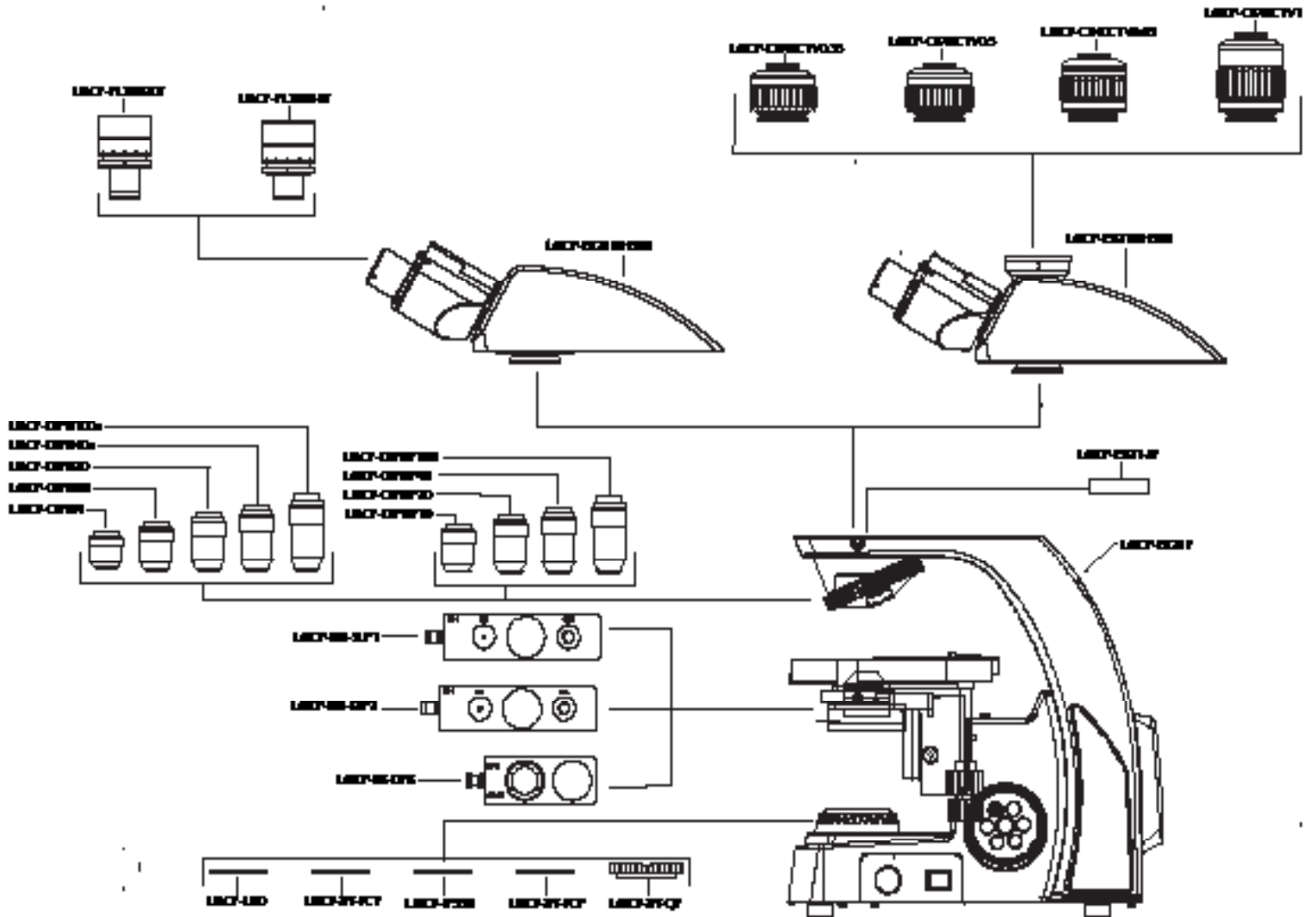


ACCESSORIES

| | | |
|------------------------------|------------------|---|
| 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 |
| 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 |
| 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 |

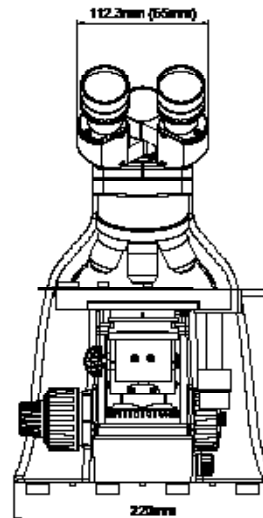
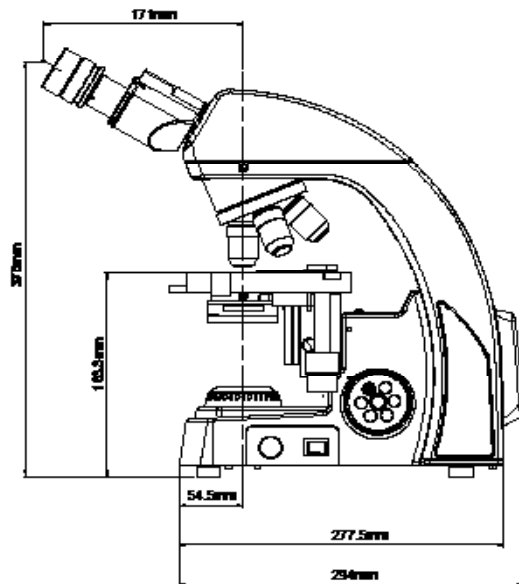
NOTE - All Laxco microscopes are manufactured in conformance to current antifungal standards. The observation tube is resistant to bacteria and fungi that may be present in the environmental setting of the microscope.

CONFIGURATION CHART



DIMENSIONS

LMC 2P Dimensions
Weight - 14 pounds





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