Lens Test Projector P-TP7
Glass & Filter Inserts, 60 mm LED Image Circle, Lens Data & Control
**State-of-the-Art Frontend**

**60 mm LED Image Circle**

The LED light source evenly illuminates a large 60 mm image circle for simulating large camera sensors beyond full frame, like ARRI Alexa LF, ARRI Alexa 65, RED Monstro, SONY Venice, and further developments.

**LED Light Engine with CPC technology**

Eliminating the light fall-off on the edge of traditional lenses the P-TP7 uses a Compound Parabolic Concentrator (CPC) instead of standard lens units. This sophisticated light engine guarantees illumination uniformity.

**Glass and Filter Inserts**

The 3x3” glass insert between lens mount and reticle accounts for the effects of optical low pass filters or sensor cover glasses (up to 5 mm thickness) in cameras. The 3x3” filter insert between light engine and reticle simulates specific color spectrums and temperatures with standard 3x3” filters (up to 4.6 mm thickness).

**Enhanced Workflow**

**Lens Data Read-out**

Two multiport connectors on both sides of the projector give full access to the lens, sockets, accessories, and projector.

**Electronic Mounts and Sockets**

The electronic lens mounts and the lens data socket provide electrical power to the lens and enable read-out, controlling and programming of lens encoder positions (like /i-Data and LDS meta data). The lens port socket powers ENG / broadcast lenses and examines VTR, Return, and Follow Voltages.

**Modularly Built System**

The P-TP7 offers the traditional way of manual back focus via a knob with friction clutch protection. Calibration and read-out of back-focus is done via an analog or digital gauge.

The back-focus is adjusted by a cable bound control or the dedicated Chrosziel MagNum wireless Focus, Iris, Zoom (FIZ) Lens Control System (LCS).
Basic Setup – Highlights

- Multicolor gooseneck LED working light (white / red / green / blue / off)
- Lens Test Chart (Reticule) (non-rotating safeguard for anamorphic lenses with precision below 1/3°)
- Measurement Plane Indicator (to attach tape measure)
- 60 mm Image Circle
- Easy Access to Centering Screws of Zoom
- Quick Release Large Format Base Mount (with built-in electronics)
- Built-in 19mm Rod Supports
- Manual Back Focus / Flange Depth (with friction clutch protection)
- MultiPort Connector
- Dimmable Working Light
- Remote Back Focus / Flange Depth (cable connected remote control or wireless back focus access via wireless F72)
- 3-way LED Light Brightness (high / low / off)
- Lens Data Socket (access to meta data, DS-Data, LDS)
- Lens Port Socket (for lens data and control)
- Enhanced LED Light Engine (even and bright 5,000K color temperature illumination)
- Digital / Analog Dial Gauge (for back focus readout with 1 µm scale)
- Glass & Filter Inserts

What’s in the box

In the box
1x Lens Test Projector P-TP7
1x Remote control with cable
1x Multicolor LED gooseneck working light
3x Power cable (US / EU / UK)
1x Measurement gauge (1 µm scale)
1x Lens Support
2x 19mm rods
2x Filter holders
1x Printed manual

Order No. P-TP7
List Price USD 19,153.00 / EUR 16,950.00
**Lens Mount Adapters and Measuring Blocks**

Every lens mount adapter adapts for flange depth / back-focus distance by mechanical design. The Quick Release Base Mount allows for easy swapping of different mount types.

**Lens Mount Adapters with built-in electronics**

The lens mount adapters with built-in electronics are designed for powering lenses (used e.g. for attached servo drives or image stabilization) and reading-out internal lens encoder data. Lens data (like /-Data and LDS meta data) are programmed via the projector’s MultiPort (depending on lens model).

A measuring block set consists of measuring block, ground plate, and mounting flange with analog measuring gauge.

Product example pictures:

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mount type</td>
</tr>
<tr>
<td>PL</td>
</tr>
<tr>
<td>ARRI LPL</td>
</tr>
<tr>
<td>Canon EF</td>
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<tr>
<td>Sony E</td>
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</table>

**Lens Mount Adapters standard version**

A measuring block set consists of measuring block, ground plate, and mounting flange with analog measuring gauge.

Product example picture:

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>Mount type</td>
</tr>
<tr>
<td>ARRI XPL</td>
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<td>Panavision</td>
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<tr>
<td>BCNC</td>
</tr>
<tr>
<td>Aaton</td>
</tr>
<tr>
<td>Arriflex standard &amp; bayonet</td>
</tr>
<tr>
<td>C</td>
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<tr>
<td>Nikon F bayonet</td>
</tr>
<tr>
<td>Olympus</td>
</tr>
<tr>
<td>Leica M bayonet</td>
</tr>
<tr>
<td>MFT (Micro 4/3)</td>
</tr>
</tbody>
</table>
**Lens Mount Adapters with glass way**

Mount adapters with glass way simulate the operation mode of dichroic prisms splitting the image into red, green, and blue components.

A measuring block set consists of measuring block, ground plate, and mounting flange with analog measuring gauge.

Product example picture:

![Image of measuring block and flange](C-MBENG)

### Description

<table>
<thead>
<tr>
<th>Mount type</th>
<th>Adapters</th>
<th>Measuring block sets</th>
</tr>
</thead>
<tbody>
<tr>
<td>B4 2/3” HD, flange depth 65,03 mm</td>
<td>P-VMHD-L</td>
<td>C-MBHD 695.00</td>
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<tr>
<td>B4 Zeiss 2/3” HD, flange depth 65,06mm</td>
<td>P-VMZ-L</td>
<td>tba</td>
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<td>1/3” HD, flange depth 41,99mm</td>
<td>P-VM13-L</td>
<td>C-MB13 695.00</td>
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<td>B4 2/3” SD ENG, flange depth 65,24mm</td>
<td>P-VMS-L</td>
<td>C-MBENG 695.00</td>
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<td>Ikegami 2/3” SD, flange depth 76,34mm</td>
<td>P-VMI-L</td>
<td>tba</td>
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<tr>
<td>Sony 1/2” SD ENG, flange depth 52,71mm</td>
<td>P-VMS12-L</td>
<td>C-MBS12 695.00</td>
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**Lens Test Charts (Reticles)**

All reticles are interchangeable without compromising precision. They feature a non-rotating safeguard with precision below 1/3° for use with anamorphic lenses.

**65 mm ARRI, Cine & Single Chip sensors**

The 65 mm ARRI reticle for cine and single chip sensors was developed with ARRI™. The reticle shows grids in the background, aspect ratio lines, line pair bars, Siemens stars (spherical / anamorphic 1.3x / 2x), image circles (Super 35, Super 16, ARRI Alexa LF, Alexa 65), and camera formats (Alexa 16:9 / 4:3 / open gate, Alexa LF 16:9 / open gate, Alexa 65 5.2K / open gate).

**Description**

<table>
<thead>
<tr>
<th>Order No.</th>
<th>List Price (EUR)</th>
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<tr>
<td>P-TCARRI-L</td>
<td>2,650.00</td>
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**65 mm Cine & Single Chip sensors**

The 65 mm cine and single chip sensors reticle shows grids in the background, aspect ratio lines, line pair bars, Siemens stars (spherical / anamorphic 2x), image circles (Super 35, Full Frame, Super 16, Medium Format), and camera formats (Super 35, RED Monstro / PV DXL2 8K Full Frame 1.9:1, ARRI Alexa 16:9, ARRI Alexa LF Open Gate, Full Frame, ARRI Alexa LF 16:9, ARRI Alexa Open Gate, Sony Venice, RED Helium 8K, ARRI Alexa 4:3, Four Thirds).

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<td>P-TC65-L</td>
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<tr>
<td>P-TC65A-L</td>
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</table>

**Customized Reticles**

Adapting to needs and workflows in lens testing Chrosziel offers custom reticle designs. The pattern can be supplied as machine-readable design for manufacturing or designed by Chrosziel as a service based on a drawing or sketch. A surcharge applies in addition to reticle itself. For design as a service an hourly rate for design work applies if applicable.

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<thead>
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<th>Order No.</th>
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<tr>
<td>P-TCIND-3</td>
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<tr>
<td>P-TCIND-5</td>
<td>2,750.00</td>
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<tr>
<td>P-TCIND-10</td>
<td>755.00</td>
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Useful Accessories (I)

Laser Distance Measuring Device

The laser distance measuring device mounts directly on the MultiPort connector of the projector. It displays the distance between the reticle plane and the projection screen.

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<th>List Price (EUR)</th>
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<tbody>
<tr>
<td>Laser Distance Measuring Device</td>
<td>P-LDM</td>
<td>895.00</td>
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</table>

MultiPort Data Converter to USB

The MultiPort data converter to USB transfers internal serial CAN bus 1 & 2, serial RS-232 and RS-422 signals via the MultiPort connectors and a standard USB cable to an external device like a PC. It enables read-out and control of laser distance measuring device data, lens meta data, CAN bus motor data, and communicates with broadcast ENG lenses.

**Description**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>MultiPort Data Converter to USB</td>
<td>P-USB-TP7</td>
<td>595.00</td>
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</tbody>
</table>

Laser Pointer

For zoom tracking the laser pointer is mounted on the top of the lens test projector and shows a red laser dot on the wall representing the lens optical center of zoom. It is adjustable in Pan and Tilt directions.

**Description**

<table>
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<tr>
<th>Description</th>
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<th>List Price (EUR)</th>
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</thead>
<tbody>
<tr>
<td>Laser pointer</td>
<td>P-LP-TP6/7</td>
<td>375.00</td>
</tr>
</tbody>
</table>
Useful Accessories (II)

Digital Measuring Gauge

The digital measuring gauge shows the back-focus distance on the display with 1μm precision. The digital measuring gauge RS232 connection cable connects via RS232 port with other devices for back-focus read-out (e.g. Chrosziel MagNum).

![Image of P-MN-Gauge and P-MG-D1]

**Description**

<table>
<thead>
<tr>
<th>Digital Measuring Gauge (1μm scale)</th>
<th>Order No.</th>
<th>List Price (EUR)</th>
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<tbody>
<tr>
<td>Digital Measuring Gauge RS232 connection cable</td>
<td>P-MG-D1</td>
<td>670.00</td>
</tr>
<tr>
<td>Digital Measuring Gauge RS232 connection cable</td>
<td>P-MN-GAUGE</td>
<td>380.00</td>
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</tbody>
</table>

Glass block

Designed for the simulation of optical low pass filters, ND filters and camera sensor protection glass of the ARRI Alexa series or cameras with similar light path. The glass with 3 mm thickness is optimized to a tolerance of below 3 μm and features a precise antireflective optical coating, tempering and polishing. It is premounted in a 3x3 filter holder with spacer plate.

![Image of P-GLASS-3]

**Description**

<table>
<thead>
<tr>
<th>Glass block</th>
<th>Order No.</th>
<th>List Price (EUR)</th>
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</thead>
<tbody>
<tr>
<td>Glass block</td>
<td>P-GLASS-3</td>
<td>795.00</td>
</tr>
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</table>
**Wireless operation**

**MagNum wireless follow focus system**

For wireless control of the internal back-focus motor the combined power/motor control cable (P-MN-CABLE) and the MagNum wireless FIZ (MN-200) are used.

For digital read-out of the back-focus on the MagNum hand unit, the digital measuring gauge (P-MG-D1), the RS232 cable (P-MN-GAUGE) and the MagNum receiver are connected. The back-focus is shown with 1µm precision both on the displays of the digital gauge and the MagNum hand unit.

By adding one motor (e.g. CDM-100) focus control is available to the MagNum hand unit. To add a second motor for iris or zoom control the MagNum receiver is extended with the MagNum Extension Interface Module (MN-EXT-MOT-LP). This motor is controlled by the optional Zoom Rocker (MN-ZR) mounted at the back side of the MagNum hand unit.

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<tbody>
<tr>
<td>MagNum power &amp; motor cable</td>
<td>P-MN-CABLE</td>
<td>350.00</td>
</tr>
<tr>
<td>MagNum 2-channel wireless FIZ control</td>
<td>MN-200</td>
<td>4,450.00</td>
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<tr>
<td>MagNum Extension Interface Module</td>
<td>MN-EXT-MOT-LP</td>
<td>1,480.00</td>
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<tr>
<td>MagNum Zoom Rocker for MagNum Hand Unit</td>
<td>MN-ZR</td>
<td>625.00</td>
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<tr>
<td>Chrosziel Digital Motor CDM-100</td>
<td>CDM-100</td>
<td>895.00</td>
</tr>
</tbody>
</table>
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