



# **AUTOMATION GUIDE**

Evident/Olympus microscopes



# Introduction

We designed this brochure to provide in-depth information about the range of equipment compatible with Evident/Olympus microscopes. It covers the majority of current Evident/Olympus microscopes, as well as some earlier generation products of the same type.

Please do not hesitate to contact Prior Scientific if your microscope does not appear on this list as some of the products shown here may still be compatible.

More information about our products can be found by contacting a Prior representative, emailing [inquiries@prior.com](mailto:inquiries@prior.com) or by visiting [prior.com](http://prior.com).

We also have an extensive collection of datasheets freely available on our website or contacting Prior Scientific.

While every effort has been made to ensure that the products listed are compatible with each microscope, specific add-ons or configurations may render some products incompatible. We recommend contacting a Prior Scientific sales manager before ordering.

Please note that the parts may vary in availability and part numbers and specifications may change without warning. Whilst we have attempted to verify that the information here is accurate, we cannot guarantee that it is completely up to date and error free; thus we suggest contacting Prior before ordering in order to ensure that all equipment will be compatible with your microscope and suitable for your application. The microscopes featured here are for illustrative purposes only. All intellectual property relating to these microscopes, including patents and trademarks, remain the property of their respective owners. Evident/Olympus is a registered trademark of Evident Corporation. ProScan®, OptiScan® and ZDeck® and the Prior Scientific logo are registered trademarks of Prior Scientific Ltd.

# Contents

Introduction.....	3	Evident/Olympus IX81 configuration chart.....	26
Contents.....	4	Evident/Olympus IX81 configuration guide ....	28
ProScan III controller configuration guide .....	6	Motorized XY stages and sample holders.....	28
Evident/Olympus IX73 configuration chart.....	8	Stage accessories .....	28
Evident/Olympus IX73 configuration guide ....	10	Nanopositioning stages and sample holders .....	29
Motorized XY stages and sample holders.....	10	Objective positioners and adapters.....	29
Stage accessories .....	10	Motorized focus .....	29
Nanopositioning stages and sample holders .....	11	Autofocus .....	30
Objective positioners and adapters.....	11	Illumination .....	30
Motorized focus .....	11	Excitation path.....	31
Autofocus .....	12	Emission path .....	31
Illumination .....	12	Evident/Olympus BX41/BX51/BX43/BX53	
Excitation path.....	13	configuration chart .....	32
Emission path .....	13	Evident/Olympus BX41/BX51/BX43/ BX53	
Deck inserts.....	13	configuration guide .....	34
Evident/Olympus IX83 configuration chart.....	14	Stages and sample holders .....	34
Evident/Olympus IX83 configuration guide ....	16	Motorized XY stages and sample holders.....	34
Motorized XY stages and sample holders.....	16	Flat top XY motorized stages and sample holders .....	34
Stage accessories .....	16	Large format XY motorized stages and sample holders .	35
Nanopositioning stages and sample holders .....	17	Objective positioners and adapters.....	35
Objective positioners and adapters.....	17	Motorized focus .....	35
Illumination .....	18	Autofocus .....	36
Excitation path.....	18	Illumination .....	36
Emission path .....	19	Excitation path.....	37
Deck inserts.....	19	Robotic slide loader .....	37
Evident/Olympus IX71 configuration chart.....	20	Evident/Olympus BX61 configuration chart ...	38
Evident/Olympus IX71 configuration guide ....	22	Evident/Olympus BX61 configuration guide ...	40
Motorized XY stages and sample holders.....	22	Stages and sample holders .....	40
Stage accessories .....	22	Motorized XY stages and sample holders.....	40
Nanopositioning stages and sample holders .....	23	Flat top XY motorized stages and sample holders .....	40
Objective positioners and adapters.....	23	Large format XY motorized stages and sample holders .	41
Motorized focus .....	23	Objective positioners and adapters.....	41
Autofocus .....	24	Motorized focus .....	41
Illumination .....	24	Autofocus .....	42
Excitation path.....	25	Illumination .....	42
Emission path .....	25	Excitation path.....	43

Evident/Olympus BX63 configuration chart ...	44	Evident/Olympus MX61L/MX63L configuration chart .....	66
Evident/Olympus BX63 configuration guide ..	46	Evident/Olympus MX61L/MX63L configuration guide .....	68
Flat top XY motorized stages and sample holders .....	46	Stages and sample holders .....	68
Objective positioners and adapters.....	46	Motorized XY stages and sample holders for up to 6 inch diameter wafers.....	68
Autofocus .....	47	Motorized XY stages and sample holders for up to 8 inch diameter wafers.....	68
Illumination .....	47	Motorized XY stages and sample holders for up to 12 inch diameter wafers.....	69
Excitation path.....	48	Objective positioners and adapters.....	69
Evident/Olympus BX51WI/BX61WI configuration chart .....	50	Motorized focus.....	70
Evident/Olympus BX51WI/BX61WI configuration guide .....	52	Autofocus .....	70
Stages and sample holders .....	52	Illumination .....	71
Motorized XY stage and sample holders .....	52	Excitation path.....	71
ZDeck stages and sample holders .....	53	Evident/Olympus MVX10 configuration chart.	72
Nanopositioning stages and sample holders.....	53	Evident/Olympus MVX10 configuration guide	74
Objective positioners and adapters.....	54	Stages and sample holders .....	74
Motorized focus .....	54	Motorized XY stages and sample holders.....	74
Autofocus .....	54	Flat top XY motorized stages and sample holders .....	74
Illumination .....	55	Large format XY motorized stages and sample holders .	75
Excitation path.....	55	Motorized focus.....	75
Evident/Olympus MX50/MX51 configuration chart .....	56	Illumination .....	75
Evident/Olympus MX50/MX51 configuration guide .....	58	Excitation path.....	75
Stages and sample holders .....	58	Evident/Olympus SZX series configuration chart	76
Motorized XY stages and sample holders for up to 6 inch diameter wafers.....	58	Evident/Olympus SZX configuration guide .....	78
Objective positioners and adapters.....	58	Stages and sample holders .....	78
Motorized focus .....	59	Motorized XY stages and sample holders.....	78
Autofocus .....	59	Flat top XY motorized stages and sample holders .....	78
Illumination .....	59	Large format XY motorized stages and sample holders .	79
Excitation path.....	59	Motorized focus.....	79
Evident/Olympus MX61/MX63 configuration chart .....	60	Illumination .....	79
Evident/Olympus MX61/MX63 configuration guide .....	62	Excitation path.....	80
Stages and sample holders .....	62	Notes .....	81
Motorized XY stages and sample holders for up to 6 inch diameter wafers.....	62		
Motorized XY stages and sample holders for up to 8 inch diameter wafers.....	62		
Objective positioners and adapters.....	63		
Motorized focus .....	63		
Autofocus .....	63		
Illumination .....	64		
Excitation path.....	64		

# ProScan III controller configuration guide

The ProScan III controller range can be used to control a wide range of Prior Scientific's microscope automation equipment. Choosing the correct controller is critical to ensuring that all of your chosen components can be used effectively. After selecting the hardware for your microscope, use the following guide to identify the correct controller. Systems which already utilize a ProScan III controller but cannot control some pieces of hardware may be upgraded using an ancillary box, depending on revision status.

All ProScan III controllers can be used with the CS200 series joysticks. The CS200 can fulfill XYZ joystick requirements and can be configured to control a number of automated functions, such as filter wheels and shutters, through its programmable buttons.

Contact Prior Scientific or refer to the [CS200](#) user manual for further information.

For motorized microscope upgrades on a lower budget, please contact Prior Scientific to learn more about our OptiScan product range.

**Stages:** Determine if your stage is a linear or stepper motor stage as these controllers are not interchangeable. All ProScan III controllers which can control stages also support encoders.

**Focus:** All ProScan III controllers which can control stepper motor focus systems also support encoders. Nanopositioning products in this configuration guide are supplied with their own controller, which can be operated through the ProScan III if desired. If using a H101E1F, H101E2F or encoded ZDeck with an encoded focus system please contact Prior Scientific before placing your order.

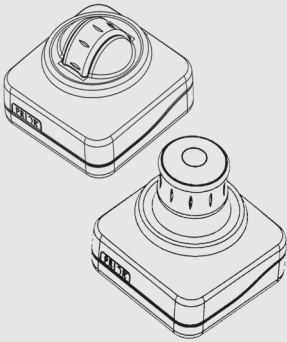
**Filter wheels:** For systems without a motorized stage or focus use the H31ZFE/V31F controller. Please note that it may not be possible to control more than 3 filter wheels with some third party software.

**Shutters:** For systems without a motorized stage or focus use the H31ZFE/V31F controller. Please note that it may not be possible to control more than 3 shutters with some third party software.

**Metal Halide Illuminators:** Third party software can control the L200S directly without the need for a controller. Alternatively, the built in shutter of the L200S and L220S can be controlled through any ProScan III controller which has a shutter port. The lamp on/off and shutter open/closed trigger ports can also be controlled through any controller with a trigger board. The L200 and L220 are completely standalone and do not require a ProScan III controller.

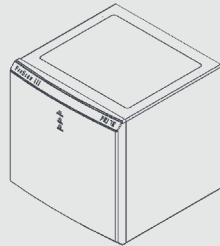
**Slide loader:** A variant of the ProScan III controller is supplied with the SL160 slide loader to control all motion and illumination options.

### CS200XY/ CS200Z



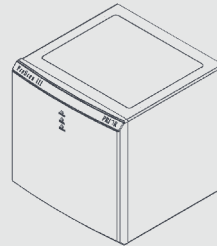
- XY and/or Z joystick control
- Programmable buttons

### H31ZFE/V31F



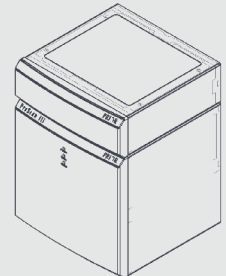
- 3x filter wheels
- 3x shutters
- L200S
- LDB103

### H31XYZE/ V31XYZE



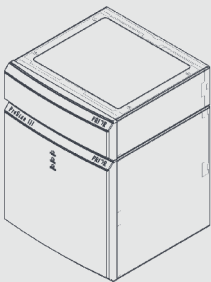
- XY stepper stage
- Z axis (excl. piezo)
- Encoders

### V31XYZET



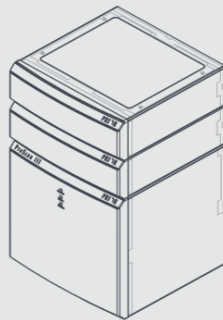
- XY stepper stage
- Z axis (excl. piezo)
- Encoders
- Trigger board

### H31XYZEF/ V31XYZEF



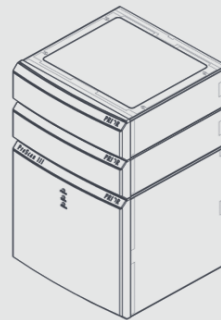
- XY stepper stage
- 3x filter wheels
- Z axis (excl. piezo)
- 3x shutters
- L200S
- Encoders

### V31XYZEFT



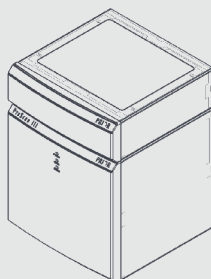
- XY stepper stage
- 3x filter wheels
- Z axis (excl. piezo)
- 3x shutters
- L200S
- LDB103
- Encoders
- Trigger board

### V31XYZEF2



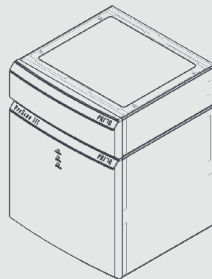
- XY stage
- 6x filter wheels
- Z axis (excl. piezo)
- 6x shutters
- L200S
- Encoders

### VLD31XYZFG



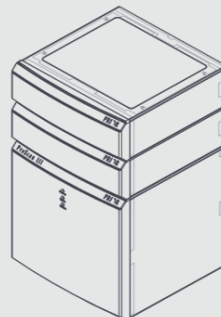
- XY linear stage
- 3x filter wheels
- Z axis (excl. piezo)
- 3x shutters
- L200S
- Encoders

### VLD31XYZTG



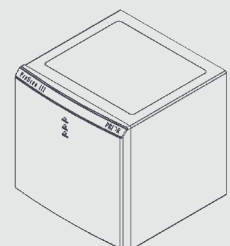
- XY linear stage
- Z axis (excl. piezo)
- Encoders
- Trigger board

### VLD31XYZFTG



- XY linear stage
- 3x shutters
- Z axis (excl. piezo)
- L200S
- Trigger board
- Encoders
- 3x filter wheels

### HLD31XYZG/ VLD31XYZG

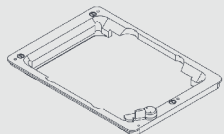


- XY stage
- Encoders
- Z axis (excl. piezo)

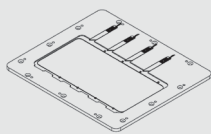


# Evident/Olympus IX73 configuration chart

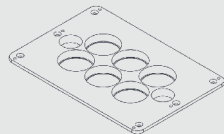
## 6 Sample holders



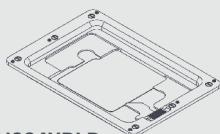
**H223XR**  
Extra recessed holder for micro titer plates (85x128mm)



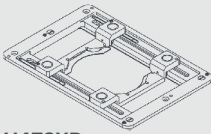
**H234XR**  
Four slide holder, extra recessed



**H658**  
Holder for six mounted metallurgical specimens



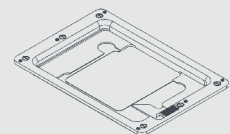
**H224XRLP**  
Low profile 3 in x 1 in slide holder



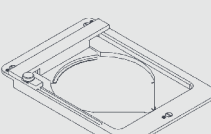
**H473XR**  
Universal sample holder



**H659**  
Holder for one mounted metallurgical specimen



**H237XRLP**  
Low profile 3 in x 2 in slide holder

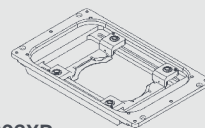


**H229XR**  
Universal Petri dish holder

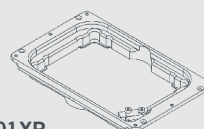


**H649**  
Holder for a single mounted metallurgical specimen

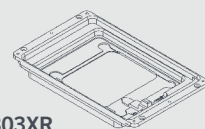
## 9 Nanopositioning sample holders



**QGSP302XR**  
SP universal sample holder XR

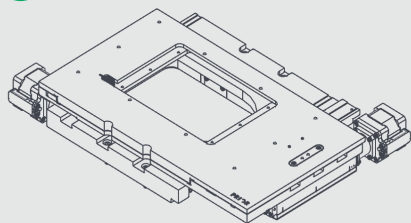


**QGSP301XR**  
SP multiwell holder XR

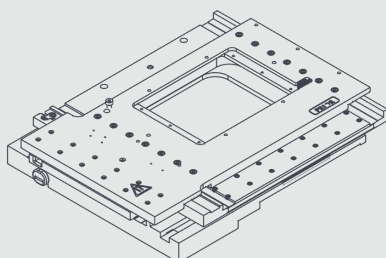


**QGSP303XR**  
Slide holder

## 1 Stages

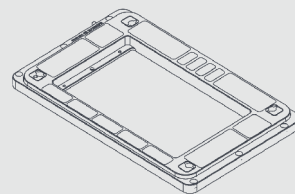


**H117P1XD, H117E1XD**  
Proscan inverted stage



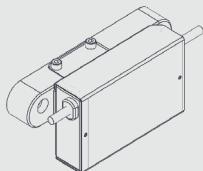
**HLD117IX**  
Linear motor stage

## 9 Nanopositioning stages

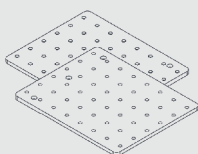


**QGSP400-D1**  
**QGSP600-D1**  
**QGSP800-D1**

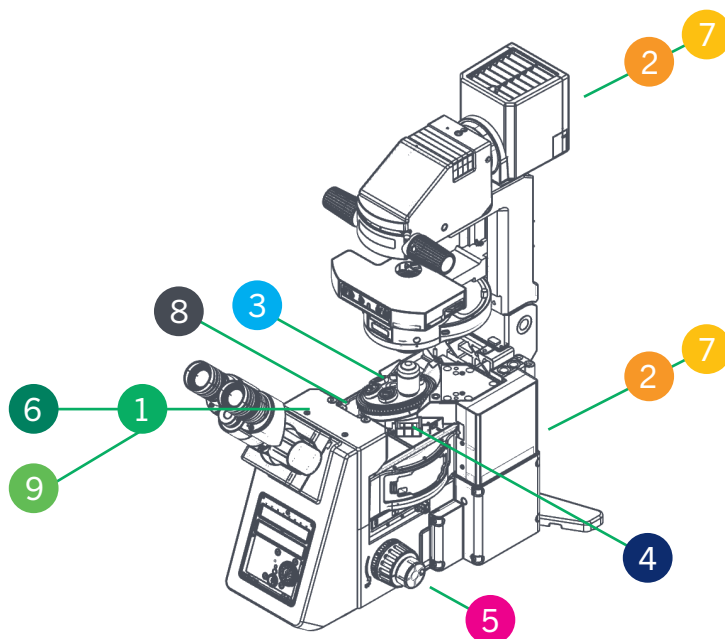
## 6 Stage accessories



**H4100**  
Heat box mounting kit

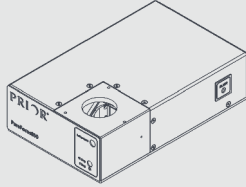


**H117ACCM**  
Pair of stage extension wings

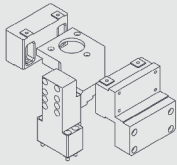




#### 4 Autofocus

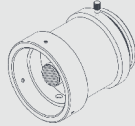


**PF850**  
PF head, controller with  
digipot power supply, cables



**PF202** - Two deck system (both decks used)  
**PF208** - Two deck system (unused upper deck)  
**PF214** - Single deck system  
PureFocus mounting kits

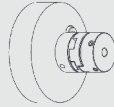
#### 5 Motorized focus (IX73 only)



**PS3H122R**  
Generic focus drive and  
adapter

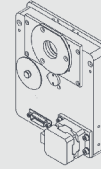


**H807**  
Focus sleeve

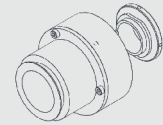


**H122KBIX**  
Direct fine focus coupling

#### 8 Emission path

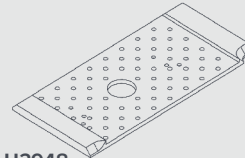


**HF106A, HF110,  
HF110A**

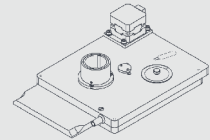


**HF236**  
Filter wheel adapter

#### 8 Deck inserts



**H3948**  
Breadboard  
for filter wheel deck

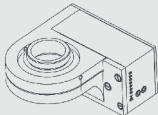


**HF108IX3**  
Breadboard  
for filter wheel deck

#### 3 Piezo objective positioner



**QG-OP-MIC-RMS**  
Microscope adapter

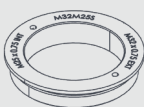


**QGOP-400-INV-D1**  
OP400 objective scanner  
system (0–500 g load)

**QGOP-400-INV-HL-D1**  
OP400 objective scanner  
system (500–1000 g load)

**QGOP-800-INV-D1**  
OP800 objective scanner  
system (0–500 g load)

**QGOP-800-INV-HL-D1**  
OP800 objective scanner  
system (500–1000 g load)

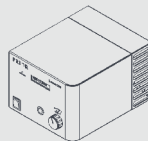


**QG-OP-OBJ-RMS**  
Objective adapters

#### 7 Illumination

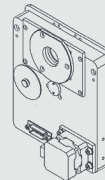


**L200SIX, L220SIX**  
Fluorescence illuminator,  
built in shutter



**L200IX, L220IX**  
Fluorescence illuminator

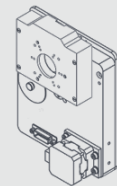
#### 2 Excitation path



**HF110A**  
Filter wheel, 10 position,  
25 mm diameter filters

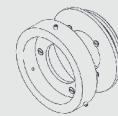
**HF106A**  
Filter wheel, 6 position,  
25 mm diameter filters

**HF108A**  
Filter wheel, 8 position,  
32 mm diameter filters

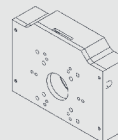


**HF110A + HF202HT**  
10 position 25 mm diameter  
filter wheel plus shutter  
combination

**HF108A + HF201HT**  
8 position 32 mm diameter  
filter wheel plus shutter  
combination

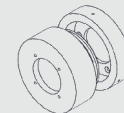


**HF235**  
Filter wheel adapter



**HF202HT**  
25mm high temperature  
standalone shutter

**HF204HT**  
35mm high temperature  
standalone shutter



**HF238**  
Shutter adapter  
for transmitted lamp

See the following pages for more product information.

# Evident/Olympus IX73 configuration guide

The Evident/Olympus IX73 microscope has two variants; the IX73P1F and IX73P2F, which have 1 and 2 decks respectively for filter turrets and other accessories. It is important to identify the variant in order to ensure compatibility.

## Motorized XY stages and sample holders

All the sample holders listed are compatible with the H117P1XD, H117E1XD and HLD117IX. At least one sample holder is required. For microscopes equipped with motorized DIC units, the H4100 is required to ensure the stage can be fitted correctly. The H117ACCM breadboard attachments can be added to all stages to provide mounting points for probe stations.

Part	Description
HLD117IX	Linear motor stage, LH cable
H117P1XD	ProScan inverted stage, 1 mm pitch, 400 step, Evident/Olympus IX73
H117E1XD	ProScan inverted stage, encoded, 1 mm pitch, 400 step, Evident/Olympus IX73
H473XR	Universal sample holder (slides, Petri dishes, small flasks), extra recessed
H223XR	Extra recessed holder for micro titer plates (85x128mm)
H224XRLP	Low profile 3 in x 1 in slide holder, extra recessed
H229XR	Universal Petri dish holder, extra recessed
H234XR	Four 3 in x 1 in slide holder, extra recessed
H23X200	200 ml flask holder (Greiner)
H237XRLP	Low profile 3 in x 2 in slide holder, extra recessed
H229D35XR-6	Holder for 6 x 35 mm Petri dishes
H649	Holder for a single 1 in, 1.25 in and 1.5 in mounted metallurgical specimen
H657	Holder for one mounted metallurgical specimen, 2 in diameter
H658	Holder for six mounted metallurgical specimens, 1.25 in diameter
H659	Holder for one mounted metallurgical specimen, 1.5 in diameter with 1, 2, 4 or 8 chambers

## Stage accessories

Part	Description
H4100	Heat box mounting kit for IX73 required when mounting a stage on a micro-scope with a motorized DIC unit
H117ACCM	Pair of stage extension wings for H117 stages, breadboard format with 6 mm tapped holes for mounting micromanipulators or other accessories

## Nanopositioning stages and sample holders

Nanopositioning stages require a suitable motorized stage for mounting. All Prior motorized stages listed in this guide are compatible. Please contact Prior Scientific if the microscope has another brand of motorized stage. Note that a sample holder from the nanopositioning stage section is required for use, and replaces the sample holder fitted to the motorized stage.

Part	Description
QGSP400-D1	System SP400, 400 µm travel, and NPC-D-6110 controller
QGSP600-D1	System SP600, 600 µm travel, and NPC-D-6110 controller
QGSP800-D1	System SP800, 800 µm travel, and NPC-D-6110 controller
QGSP301XR	SP multiwell holder XR
QGSP302XR	SP universal sample holder XR
QGSP303XR	SP single slide holder suitable for 1 in x 3 in and 2 in x 3 in slides

## Objective positioners and adapters

When ordering ensure the correct part number is used to specify inverted calibration. Objective positioners require a threaded adapter in order to be fitted to the microscope nosepiece and the microscope objective. Evident/Olympus microscopes typically use RMS threads; please contact Prior Scientific if the nosepiece uses an alternative thread size. Some IX73 nosepieces have a raised lip surrounding the objective positions, which may clash with the objective positioner; a 15 mm spacer can be added to clear the lip. Please note that the two objective positions adjacent to the objective positioner will not be usable due to space constraints. A high load calibration is available for specialist heavy objectives. Control of the nanopositioning stage via Evident/Olympus Software requires the use of the Evident/Olympus Realtime Controller.

Part	Description
QGOP-400-INV-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-400-INV-HL-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QGOP-800-INV-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-800-INV-HL-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QG-OP-MIC-RMS	OP microscope adapter RMS
QG-OP-OBJ-RMS	OP objective adapter M32 x 0.75 to RMS
QG-OP-SPACE-RMS	RMS static objective spacer to align with OP-400 objective

## Motorized focus

The PS3H122R plus H807 combination is required to drive the fine focus knob of the microscope. The coarse focus will not be motorized. The H122KBIX direct coupling can be added for more precise motorized control.

Part	Description
PS3H122R	Generic focus drive and adapter with rotating cable system preventing cable twisting
H807	Evident/Olympus BX and IX focus sleeve
H122KBIX	Direct fine focus coupling for Evident/Olympus IX/BX microscopes

## Autofocus

The PF850 is a standalone hardware autofocus. A kit is required for mounting. The PF202 is compatible with 2-deck IX73 systems where both decks are in use. The PF208 is compatible with 2-deck systems where only the lower deck is in use. The PF214 is compatible with 1-deck systems. The PF200, PF209 and PF300 are required for setup and maintenance. The PF404 is required for use with piezo nanopositioning systems.

Part	Description
PF850	PF head, controller with digipot power supply, cables
PF850M	PF head - line mode, controller with digipot power supply, cables
PF202	IX73/IX83 PureFocus mounting kit for 2-deck system (both decks being used)
PF208	IX73/IX83 PureFocus mounting kit for 2-deck system (unused upper deck)
PF214	IX73/IX83 PureFocus mounting kit for 1-deck system
PF209	PureFocus setup sample slide
PF200	PureFocus setup camera alignment target type 1, RMS.DIA 0.8 x 36
PF300	PureFocus setup camera jig
PF404	Piezo cable for PF850 15D to BNC

## Illumination

The L200IX and L200SIX are recommended for fluorescence microscopy (see **datasheet** for details). The L200SIX has a built in shutter mechanism which can be controlled via a ProScan III controller, so a standalone shutter is not required. The LDB1030L requires a ProScan III controller for operation and is recommended if purchasing a ProScan III controller. 35 mm shutters and filter wheels are recommended for widefield applications.

Part	Description
L200SIX	L200 Standard box, lamp, light guide, shutter and Evident/Olympus IX Collimator
L200IX	L220 Standard box, lamp, light guide and Evident/Olympus IX Collimator
L220SIX	L220 Standard box, lamp, light guide, shutter and Evident/Olympus IX Collimator
L220IX	L220 Standard box, lamp, light guide and Evident/Olympus IX Collimator

## Excitation path

Filter wheels are not supplied with filters. For systems requiring a shutter and filter wheel it is recommended to buy one of the combinations listed below. The HF235 adapter is required for filter wheels and shutters in the main episcopic illumination pathway. The H238 adapter is required for filter wheels and shutters in the transmitted light path.

Part	Description
HF235	Filter wheel adapter for Evident/Olympus BX, IX and AX series microscopes
HF238	Shutter adapter for transmitted lamp
HF202HT	25 mm high temperature standalone shutter
HF204HT	35 mm high temperature standalone shutter
HF110	Filter wheel, 10 position, 25 mm diameter filters with stand
HF110A	Filter wheel, 10 position, 25 mm diameter filters without stand
HF106A	Filter wheel, 6 position, 25 mm diameter filters without stand
HF108	Filter wheel, 8 position, 32 mm diameter filters with stand
HF108A	Filter wheel, 8 position, 32 mm diameter filters without stand
HF110A + HF200HT	10 position 25 mm diameter filter wheel plus shutter combination
HF108A + HF201HT	8 position 32 mm diameter filter wheel plus shutter combination

## Emission path

The HF236 adapter is required for fitting filter wheels to the emission port of the microscope.

Part	Description
HF236	Filter wheel adapter for Evident/Olympus IX series microscopes
HF110	Filter wheel, 10 position, 25 mm diameter filters with stand
HF110A	Filter wheel, 10 position, 25 mm diameter filters without stand
HF106A	Filter wheel, 6 position, 25 mm diameter filters without stand

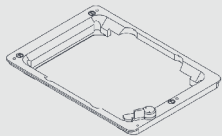
## Deck inserts

The HF108IX3 and H3948 slot into the IX73 decks. The HF108IX3 can be utilized as an emission filter wheel. The H3948 can be used as a mounting plate for third party accessories.

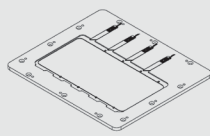
Part	Description
H3948	Breadboard for filter wheel deck of IX3 Microscope, no wheel or attachments
HF108IX3	Breadboard filter wheel, 8 position, 32 mm diameter filters for Evident/Olympus IX3

# Evident/Olympus IX83 configuration chart

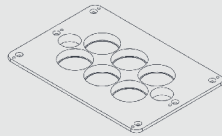
## 6 Sample holders



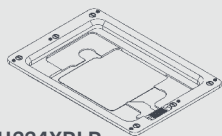
**H223XR**  
Extra recessed holder for micro  
titer plates (85x128mm)



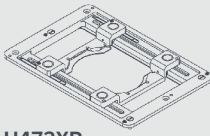
**H234XR**  
Four slide holder, extra recessed



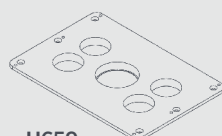
**H658**  
Holder for six mounted  
metallurgical specimens



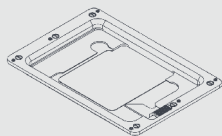
**H224XRLP**  
Low profile 3 in x 1 in slide holder



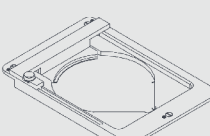
**H473XR**  
Universal sample holder



**H659**  
Holder for one mounted  
metallurgical specimen



**H237XRLP**  
Low profile 3 in x 2 in slide holder

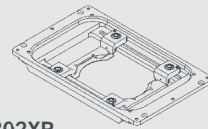


**H229XR**  
Universal Petri dish holder

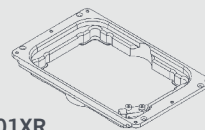


**H649**  
Holder for a single mounted  
metallurgical specimen

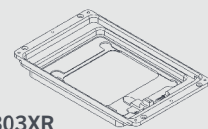
## 9 Nanopositioning sample holders



**QGSP302XR**  
SP universal sample holder XR

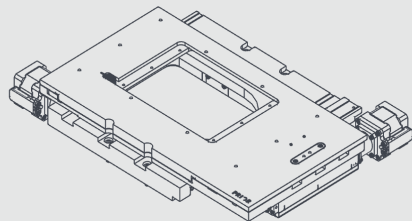


**QGSP301XR**  
SP multiwell holder XR

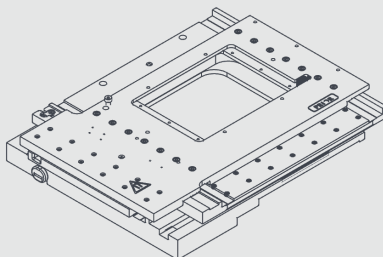


**QGSP303XR**  
Slide holder

## 1 Stages

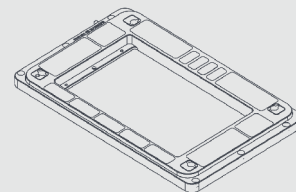


**H117P1XD, H117E1XD**  
Proscan inverted stage



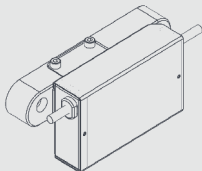
**HLD117IX**  
Linear motor stage

## 9 Nanopositioning stages

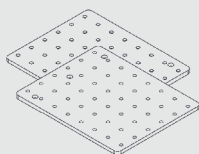


**QGSP400-D1**  
**QGSP600-D1**  
**QGSP800-D1**

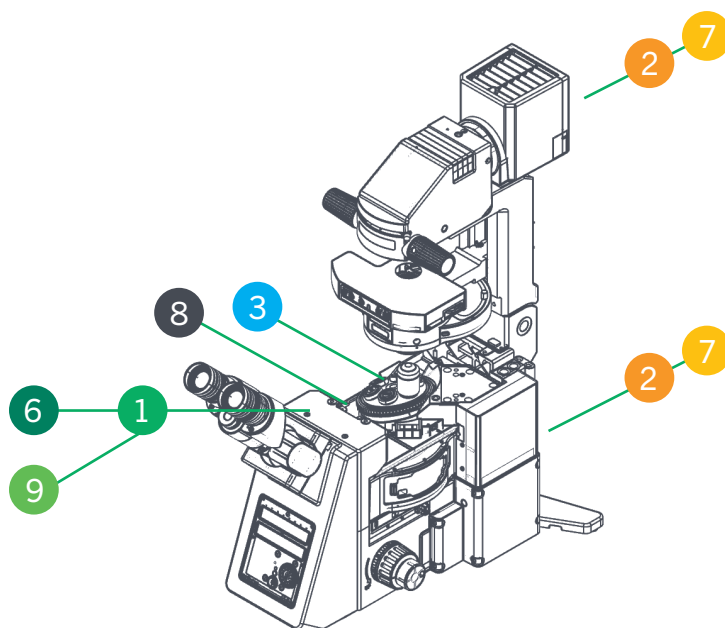
## 6 Stage accessories



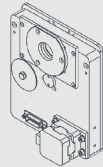
**H4100**  
Heat box mounting kit



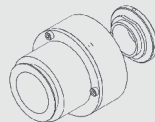
**H117ACCM**  
Pair of stage extension wings



## 8 Emission path

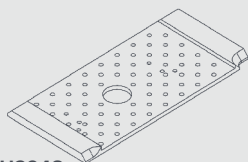


**HF106A, HF110,  
HF110A**

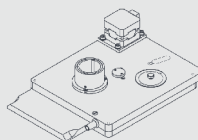


**HF236**  
Filter wheel adapter

## 8 Deck inserts



**H3948**  
Breadboard  
for filter wheel deck

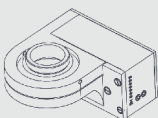


**HF108IX3**  
Breadboard  
for filter wheel deck

## 3 Piezo objective positioner



**QG-OP-MIC-RMS**  
Microscope adapter

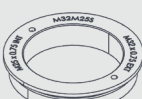


**QGOP-400-INV-D1**  
OP400 objective scanner  
system (0–500 g load)

**QGOP-400-INV-HL-D1**  
OP400 objective scanner  
system (500–1000 g load)

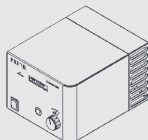
**QGOP-800-INV-D1**  
OP800 objective scanner  
system (0–500 g load)

**QGOP-800-INV-HL-D1**  
OP800 objective scanner  
system (500–1000 g load)

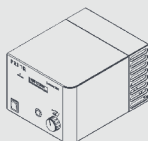


**QG-OP-OBJ-RMS**  
Objective adapters

## 7 Illumination

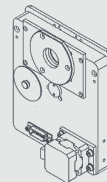


**L200SIX, L220SIX**  
Fluorescence illuminator,  
built in shutter



**L200IX, L220IX**  
Fluorescence illuminator

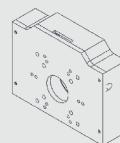
## 2 Excitation path



**HF110A**  
Filter wheel, 10 position,  
25 mm diameter filters

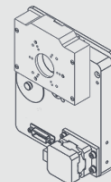
**HF106A**  
Filter wheel, 6 position,  
25 mm diameter filters

**HF108A**  
Filter wheel, 8 position,  
32 mm diameter filters



**HF202HT**  
25mm high temperature  
standalone shutter

**HF204HT**  
35mm high temperature  
standalone shutter

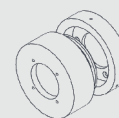


**HF110A + HF202HT**  
10 position 25 mm diameter  
filter wheel plus shutter  
combination

**HF108A + HF201HT**  
8 position 32 mm diameter  
filter wheel plus shutter  
combination



**HF235**  
Filter wheel adapter



**HF238**  
Shutter adapter  
for transmitted lamp



# Evident/Olympus IX83 configuration guide

## Motorized XY stages and sample holders

All the sample holders listed are compatible with the H117P1XD, H117E1XD and HLD117IX. At least one sample holder is required. For microscopes equipped with motorized DIC units, the H4100 is required to ensure the stage can be fitted correctly. The H117ACCM breadboard attachments can be added to all stages to provide mounting points for probe stations.

Part	Description
HLD117IX	Linear motor stage, LH cable (Evident/Olympus IX83)
H117P1XD	ProScan inverted stage, 1 mm pitch, 400 step, Evident/Olympus IX83 (DIC)
H117E1XD	ProScan inverted stage, encoded, 1 mm pitch, 400 step, Evident/Olympus IX83 (DIC)
H473XR	Universal sample holder (slides, Petri dishes, small flasks), extra recessed
H223XR	Extra recessed holder for micro titer plates (85x128mm)
H224XRLP	Low profile 3 in x 1 in slide holder, extra recessed
H229XR	Universal Petri dish holder, extra recessed
H234XR	Four 3 in x 1 in slide holder, extra recessed
H23X200	200 ml flask holder (Greiner)
H237XRLP	Low profile 3 in x 2 in slide holder, extra recessed
H229D35XR-6	Holder for 6 x 35 mm Petri dishes
H649	Holder for a single 1 in, 1.25 in and 1.5 in mounted metallurgical specimen
H657	Holder for one mounted metallurgical specimen, 2 in diameter
H658	Holder for six mounted metallurgical specimens, 1.25 in diameter
H659	Holder for one mounted metallurgical specimen, 1.5 in diameter with 1, 2, 4 or 8 chambers

## Stage accessories

Part	Description
H4100	Heat box mounting kit for IX83 required when mounting a stage on a micro-scope with a motorized DIC unit
H117ACCM	Pair of stage extension wings for H117 stages, breadboard format with 6 mm tapped holes for mounting micromanipulators or other accessories

## Nanopositioning stages and sample holders

Nanopositioning stages require a suitable motorized stage for mounting. All Prior motorized stages listed in this guide are compatible. Please contact Prior Scientific if the microscope has another brand of motorized stage. Note that a sample holder from the nanopositioning stage section is required for use, and replaces the sample holder fitted to the motorized stage.

Part	Description
QGSP400-D1	System SP400, 400 µm travel, and NPC-D-6110 controller
QGSP600-D1	System SP600, 600 µm travel, and NPC-D-6110 controller
QGSP800-D1	System SP800, 800 µm travel, and NPC-D-6110 controller
QGSP301XR	SP multiwell holder XR
QGSP302XR	SP universal sample holder XR
QGSP303XR	SP single slide holder suitable for 1 in x 3 in and 2 in x 3 in slides

## Objective positioners and adapters

When ordering ensure the correct part number is used to specify inverted calibration. Objective positioners require a threaded adapter in order to be fitted to the microscope nosepiece and the microscope objective. Evident/Olympus microscopes typically use RMS threads; please contact Prior Scientific if the nosepiece uses an alternative thread size. Some IX83 nosepieces have a raised lip surrounding the objective positions, which may clash with the objective positioner; a 15 mm spacer can be added to clear the lip. Please note that the two objective positions adjacent to the objective positioner will not be usable due to space constraints. A high load calibration is available for specialist heavy objectives. Control of the nanopositioning stage via Evident/Olympus Software requires the use of the Evident/Olympus Realtime Controller.

Part	Description
QGOP-400-INV-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-400-INV-HL-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QGOP-800-INV-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-800-INV-HL-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QG-OP-MIC-RMS	OP microscope adapter RMS
QG-OP-OBJ-RMS	OP objective adapter M32 x 0.75 to RMS
QG-OP-SPACE-RMS	RMS static objective spacer to align with OP-400 objective

## Illumination

The L200IX and L200SIX are recommended for fluorescence microscopy (see **datasheet** for details). The L200SIX has a built in shutter mechanism which can be controlled via a ProScan III controller, so a standalone shutter is not required.

Part	Description
L200SIX	L200 Standard box, lamp, light guide, shutter and Evident/Olympus IX Collimator
L200IX	L220 Standard box, lamp, light guide and Evident/Olympus IX Collimator
L220SIX	L220 Standard box, lamp, light guide, shutter and Evident/Olympus IX Collimator
L220IX	L220 Standard box, lamp, light guide and Evident/Olympus IX Collimator

## Excitation path

Filter wheels are not supplied with filters. For systems requiring a shutter and filter wheel it is recommended to buy one of the combinations listed below. The HF235 adapter is required for filter wheels and shutters in the main episcopic illumination pathway. The H238 adapter is required for filter wheels and shutters in the transmitted light path.

Part	Description
HF235	Filter wheel adapter for Evident/Olympus BX, IX and AX series microscopes
HF238	Shutter adapter for transmitted lamp
HF202HT	25 mm high temperature standalone shutter
HF204HT	35 mm high temperature standalone shutter
HF110	Filter wheel, 10 position, 25 mm diameter filters with stand
HF110A	Filter wheel, 10 position, 25 mm diameter filters without stand
HF106A	Filter wheel, 6 position, 25 mm diameter filters without stand
HF108	Filter wheel, 8 position, 32 mm diameter filters with stand
HF108A	Filter wheel, 8 position, 32 mm diameter filters without stand
HF110A + HF200HT	10 position 25 mm diameter filter wheel plus shutter combination
HF108A + HF201HT	8 position 32 mm diameter filter wheel plus shutter combination

## Emission path

The HF236 adapter is required for fitting filter wheel to the emission port of the microscope.

Part	Description
HF236	Filter wheel adapter for Evident/Olympus IX series microscopes
HF110	Filter wheel, 10 position, 25 mm diameter filters with stand
HF110A	Filter wheel, 10 position, 25 mm diameter filters without stand
HF106A	Filter wheel, 6 position, 25 mm diameter filters without stand

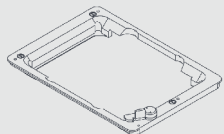
## Deck inserts

The HF108IX3 and H3948 slot into the IX83 decks. The HF108IX3 can be utilized as an emission filter wheel. The H3948 can be used as a mounting plate for third party accessories.

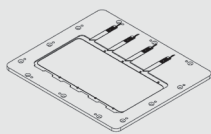
Part	Description
H3948	Breadboard for filter wheel deck of IX3 Microscope, no wheel or attachments
HF108IX3	Breadboard filter wheel, 8 position, 32 mm diameter filters for Evident/Olympus IX3

# Evident/Olympus IX71 configuration chart

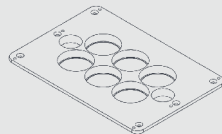
## 6 Sample holders



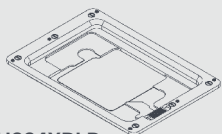
**H223XR**  
Extra recessed holder for micro titer plates (85x128mm)



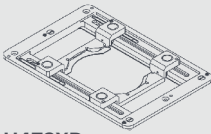
**H234XR**  
Four slide holder, extra recessed



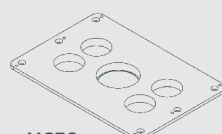
**H658**  
Holder for six mounted metallurgical specimens



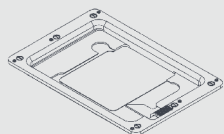
**H224XRLP**  
Low profile 3 in x 1 in slide holder



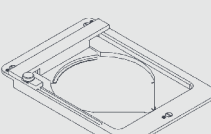
**H473XR**  
Universal sample holder



**H659**  
Holder for one mounted metallurgical specimen



**H237XRLP**  
Low profile 3 in x 2 in slide holder

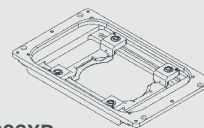


**H229XR**  
Universal Petri dish holder

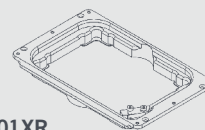


**H649**  
Holder for a single mounted metallurgical specimen

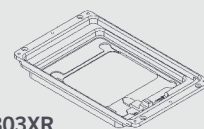
## 9 Nanopositioning sample holders



**QGSP302XR**  
SP universal sample holder XR

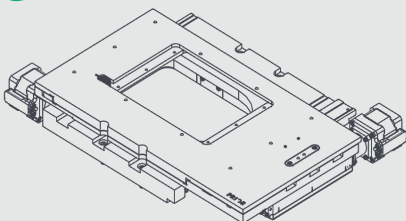


**QGSP301XR**  
SP multiwell holder XR



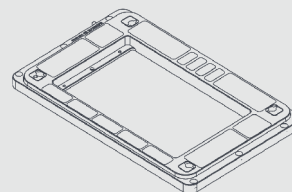
**QGSP303XR**  
Single slide holder

## 1 Stages



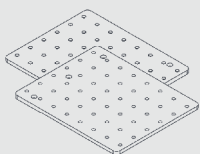
**H117P1I4, H117E1I4**  
ProScan inverted stage

## 9 Nanopositioning stages

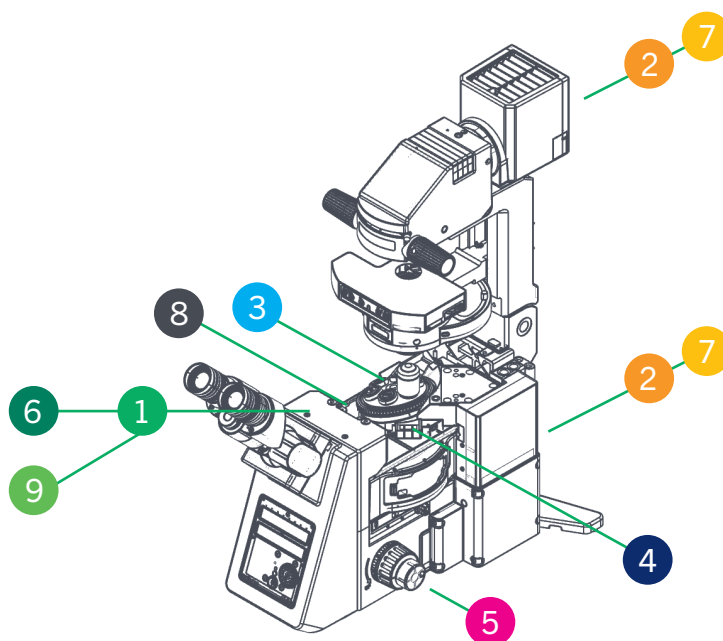


**QGSP400-D1**  
**QGSP600-D1**  
**QGSP800-D1**

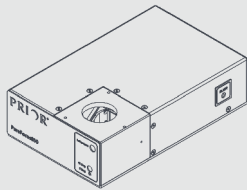
## 6 Stage accessories



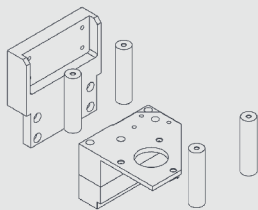
**H117ACCM**  
Pair of stage extension wings



#### 4 Autofocus

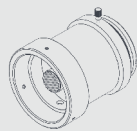


**PF850**  
PF head, controller with  
digitpot power supply, cables



**PF203**  
PureFocus mounting kits

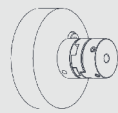
#### 5 Motorized focus



**PS3H122R**  
Generic focus drive and  
adapter

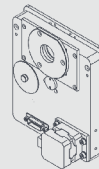


**H807**  
Focus sleeve

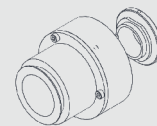


**H122KBIX**  
Direct fine focus coupling

#### 8 Emission path

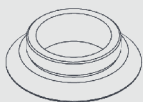


**HF106A, HF108,  
HF108A, HF110,  
HF110A**

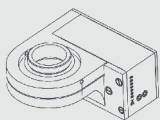


**HF236**  
Filter wheel adapter

#### 3 Piezo objective positioner



**QG-OP-MIC-RMS**  
Microscope adapter

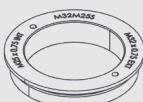


**QGOP-400-INV-D1**  
OP400 objective scanner  
system (0–500 g load)

**QGOP-400-INV-HL-D1**  
OP400 objective scanner  
system (500–1000 g load)

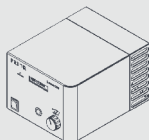
**QGOP-800-INV-D1**  
OP800 objective scanner  
system (0–500 g load)

**QGOP-800-INV-HL-D1**  
OP800 objective scanner  
system (500–1000 g load)

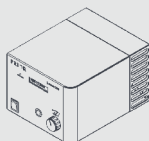


**QG-OP-OBJ-RMS**  
Objective adapter

#### 7 Illumination

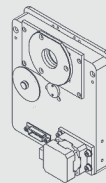


**L200SIX, L220SIX**  
Fluorescence illuminator,  
built in shutter



**L200IX, L220IX**  
Fluorescence illuminator

#### 2 Excitation path



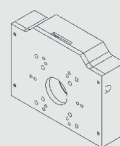
**HF110**  
Filter wheel, 10 position,  
25 mm diameter filters with stand

**HF110A**  
Filter wheel, 10 position,  
25 mm diameter filters, no stand

**HF106A**  
Filter wheel, 6 position,  
25 mm diameter filters

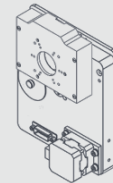
**HF108**  
Filter wheel, 8 position,  
32 mm diameter filters with stand

**HF108A**  
Filter wheel, 8 position,  
32 mm diameter filters, no stand



**HF202HT**  
25mm high temperature  
standalone shutter

**HF204HT**  
35mm high temperature  
standalone shutter

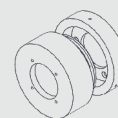


**HF110A + HF202HT**  
10 position 25 mm diameter  
filter wheel plus shutter  
combination

**HF108A + HF201HT**  
8 position 32 mm diameter  
filter wheel plus shutter  
combination



**HF235**  
Filter wheel adapter



**HF236**  
Shutter adapter  
for transmitted lamp

See the following pages for more product information.

# Evident/Olympus IX71 configuration guide

## Motorized XY stages and sample holders

All the sample holders listed are compatible with the H117P1XD, H117E1XD, H117P1I4 and H117E1I4. The specifications of the –XD and –I4 variants are identical. The frame size means the HLD117IX is not compatible with this microscope. At least one sample holder is required for each stage. The H117ACCM breadboard attachments can be added to all to provide mounting points for probe stations.

Part	Description
H117P1I4	ProScan inverted stage, part encoded, 1 mm pitch, 400 step, Evident/Olympus IX
H117E1I4	ProScan inverted stage, encoded, 1 mm pitch, 400 step, Evident/Olympus IX
H117P1XD	ProScan inverted stage, part encoded, 1 mm pitch, 400 Step, Evident/Olympus IX73 and IX83 (DIC)
H117E1XD	ProScan inverted stage, encoded, 1 mm pitch, 400 step, Evident/Olympus IX73 and IX83 (DIC)
H473XR	Universal sample holder (slides, Petri dishes, small flasks), extra recessed
H223XR	Extra recessed holder for micro titer plates (85x128mm) with diagonal corner sections removed
H224XRLP	Low profile 3 in x 1 in slide holder, extra recessed
H229XR	Universal Petri dish holder, extra recessed
H234XR	Four 3 in x 1 in slide holder, extra recessed
H23X200	200ml flask holder (Greiner)
H237XRLP	Low profile 3 in x 2 in slide holder, extra recessed
H229D35XR-6	Holder for 6 x 35mm Petri dishes
H649	Holder for a single 1 in, 1.25 in and 1.5 in mounted metallurgical specimen
H657	Holder for one mounted metallurgical specimen, 2 in diameter
H658	Holder for six mounted metallurgical specimens, 1.25 in diameter
H659	Holder for one mounted metallurgical specimen, 1.5 in diameter with 1, 2, 4 or 8 chambers

## Stage accessories

Part	Description
H117ACCM	Pair of stage extension wings for H117 stages, breadboard format with 6 mm tapped holes for mounting micromanipulators or other accessories



## Nanopositioning stages and sample holders

Nanopositioning stages require a suitable motorized stage for mounting. All Prior motorized stages listed in this guide are compatible. Please contact Prior Scientific if the microscope has another brand of motorized stage. Note that a sample holder from the nanopositioning stage section is required for use, and replaces the sample holder fitted to the motorized stage. Control of the nanopositioning stage via Evident/Olympus Software requires the use of the Evident/Olympus Realtime Controller.

Part	Description
QGSP400-D1	System SP400, 400 µm travel, and NPC-D-6110 controller
QGSP600-D1	System SP600, 600 µm travel, and NPC-D-6110 controller
QGSP800-D1	System SP800, 800 µm travel, and NPC-D-6110 controller
QGSP301XR	SP multiwell holder XR
QGSP302XR	SP universal sample holder XR
QGSP303XR	SP single slide holder suitable for 1 in x 3 in and 2 in x 3 in slides

## Objective positioners and adapters

When ordering ensure the correct part number is used to specify inverted calibration. Objective positioners require a threaded adapter in order to be fitted to the microscope nosepiece and the microscope objective. Evident/Olympus microscopes typically use RMS threads; please contact Prior Scientific if the nosepiece uses an alternative thread size. Some IX71 nosepieces have a raised lip surrounding the objective positions, which may clash with the objective positioner; a 15mm spacer can be added to clear the lip. Please note that the two objective positions adjacent to the objective positioner will not be usable due to space constraints; additional positions may be unusable on smaller nosepieces. A high load calibration is available for specialist heavy objectives. Control of the nanopositioning stage via Evident/Olympus Software requires the use of the Evident/Olympus Realtime Controller.

Part	Description
QGOP-400-INV-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-400-INV-HL-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QGOP-800-INV-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-800-INV-HL-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QG-OP-MIC-RMS	OP microscope adapter RMS
QG-OP-OBJ-RMS	OP objective adapter M32 x 0.75 to RMS
QG-OP-SPACE-RMS	RMS static objective spacer to align with OP-400 objective

## Motorized focus

The PS3H122R plus H807 combination is required to drive the fine focus knob of the microscope. The coarse focus will not be motorized. The H122KBIX direct coupling can be added for more precise motorized control.

Part	Description
PS3H122R	Generic focus drive and adapter with rotating cable system preventing cable twisting
H807	Evident/Olympus BX and IX focus sleeve
H122KBIX	Direct fine focus coupling for Evident/Olympus IX/BX microscopes

## Autofocus

The PF850 is a standalone hardware autofocus. The PF203 kit is required for mounting. The PF200, PF209 and PF300 are required for setup and maintenance. The PF404 is required for use with piezo nanopositioning systems.

Part	Description
PF850	PF head, controller with digipot power supply, cables
PF850M	PF head - line mode, controller with digipot power supply, cables
PF203	IX71 PureFocus mounting kit
PF209	PureFocus setup sample slide
PF200	PureFocus setup camera alignment target type 1, RMS.DIA 0.8 x 36
PF300	PureFocus setup camera jig
PF404	Piezo cable for PF850 15D to BNC

## Illumination

The L200IX and L200SIX are recommended for fluorescence microscopy (see **datasheet** for details). The L200SIX has a built in shutter mechanism which can be controlled via a ProScan III controller, so a standalone shutter is not required. The L220IX and L220SIX are available for customers doing fluorescence imaging in the far-red. The LDB103OL requires a ProScan III controller for operation and is recommended if purchasing a H31XYZEF/V31XYZEF controller.

Part	Description
L200SIX	L200 Standard box, lamp, light guide, shutter and Evident/Olympus IX Collimator
L200IX	L220 Standard box, lamp, light guide and Evident/Olympus IX Collimator
L220SIX	L220 Standard box, lamp, light guide, shutter and Evident/Olympus IX Collimator
L220IX	L220 Standard box, lamp, light guide and Evident/Olympus IX Collimator

## Excitation path

Filter wheels are not supplied with filters. For systems requiring a shutter and filter wheel it is recommended to buy one of the combinations listed below. The HF235 adapter is required for filter wheels and shutters in the main episcopic illumination pathway. The H238 adapter is required for filter wheels and shutters in the transmitted light path.

Part	Description
HF235	Filter wheel adapter for Evident/Olympus BX, IX and AX series microscopes
HF238	Shutter adapter for transmitted lamp
HF202HT	25 mm high temperature standalone shutter
HF204HT	35 mm high temperature standalone shutter
HF110A	Filter wheel, 10 position, 25 mm diameter filters without stand
HF110	Filter wheel, 10 position, 25 mm diameter filters with stand
HF106A	Filter wheel, 6 position, 25 mm diameter filters without stand
HF108A	Filter wheel, 8 position, 32 mm diameter filters without stand
HF108	Filter wheel, 8 position, 32 mm diameter filters with stand
HF110A + HF200HT	10 position 25 mm diameter filter wheel plus shutter combination
HF108A + HF201HT	8 position 32 mm diameter filter wheel plus shutter combination

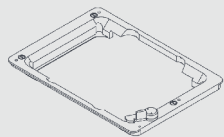
## Emission path

The HF236 adapter is required for fitting shutter and filter wheels to the emission port of the microscope.

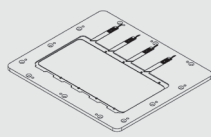
Part	Description
HF236	Filter wheel adapter for Evident/Olympus IX series microscopes
HF110	Filter wheel, 10 position, 25 mm diameter filters with stand
HF110A	Filter wheel, 10 position, 25 mm diameter filters without stand
HF106A	Filter wheel, 6 position, 25 mm diameter filters without stand

# Evident/Olympus IX81 configuration chart

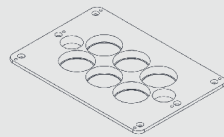
## 6 Sample holders



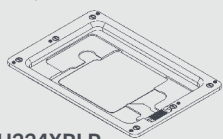
**H223XR**  
Extra recessed holder for micro titer plates (85x128mm)



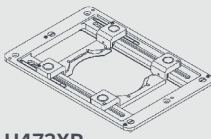
**H234XR**  
Four slide holder, extra recessed



**H658**  
Holder for six mounted metallurgical specimens



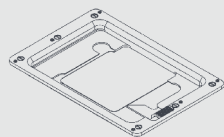
**H224XRLP**  
Low profile 3 in x 1 in slide holder



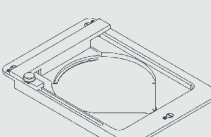
**H473XR**  
Universal sample holder



**H659**  
Holder for one mounted metallurgical specimen



**H237XRLP**  
Low profile 3 in x 2 in slide holder

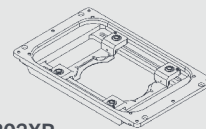


**H229XR**  
Universal Petri dish holder

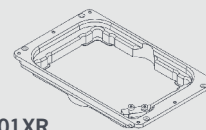


**H649**  
Holder for a single mounted metallurgical specimen

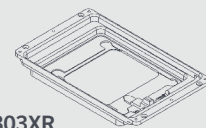
## 9 Nanopositioning sample holders



**QGSP302XR**  
SP universal sample holder XR

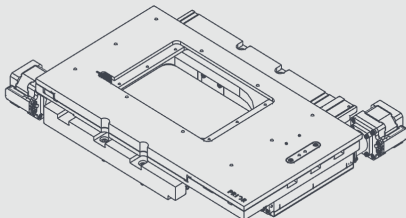


**QGSP301XR**  
SP multiwell holder XR



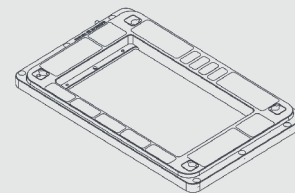
**QGSP303XR**  
Single slide holder

## 1 Stages



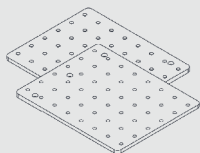
**H117P1I4, H117E1I4**  
ProScan inverted stage

## 9 Nanopositioning stages

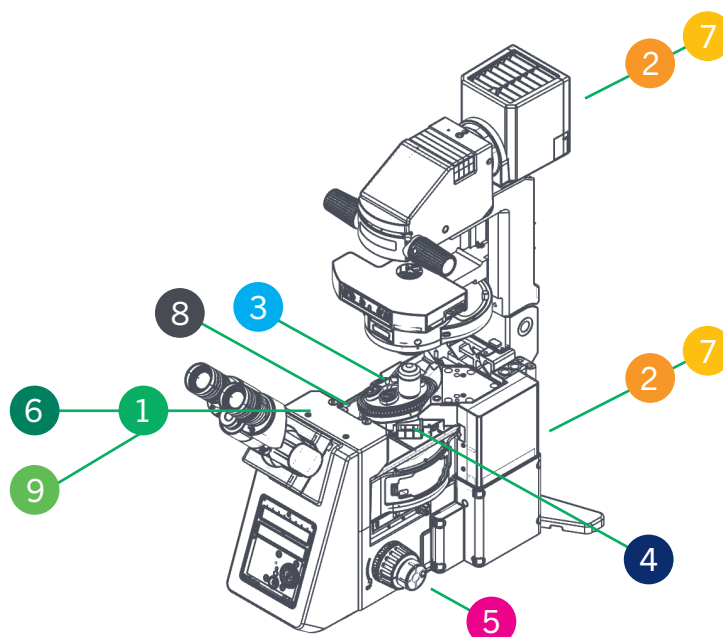


**QGSP400-D1**  
**QGSP600-D1**  
**QGSP800-D1**

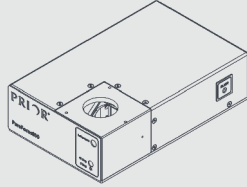
## 6 Stage accessories



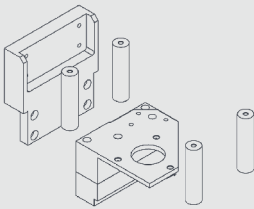
**H117ACCM**  
Pair of stage extension wings



#### 4 Autofocus

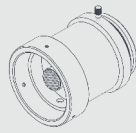


**PF850**  
PF head, controller with  
digipot power supply, cables



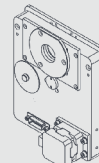
**PF213**  
PureFocus mounting kits

#### 5 Motorized focus

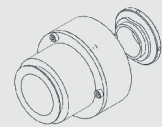


**PS3H1220LM**  
Generic focus drive and  
adapter

#### 8 Emission path

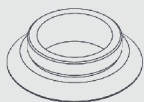


**HF106A, HF108,  
HF108A, HF110,  
HF110A**

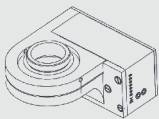


**HF236**  
Filter wheel adapter

#### 3 Piezo objective positioner



**QG-OP-MIC-RMS**  
Microscope adapter

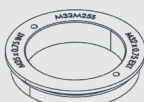


**QGOP-400-INV-D1**  
OP400 objective scanner  
system (0–500 g load)

**QGOP-400-INV-HL-D1**  
OP400 objective scanner  
system (500–1000 g load)

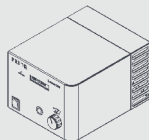
**QGOP-800-INV-D1**  
OP800 objective scanner  
system (0–500 g load)

**QGOP-800-INV-HL-D1**  
OP800 objective scanner  
system (500–1000 g load)

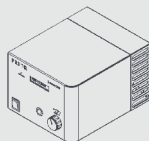


**QG-OP-OBJ-RMS**  
Objective adapter

#### 7 Illumination

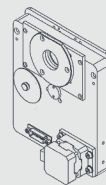


**L200SIX, L220SIX**  
Fluorescence illuminator,  
built in shutter



**L200IX, L220IX**  
Fluorescence illuminator

#### 2 Excitation path



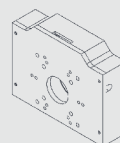
**HF110**  
Filter wheel, 10 position,  
25 mm diameter filters with stand

**HF110A**  
Filter wheel, 10 position,  
25 mm diameter filters, no stand

**HF106A**  
Filter wheel, 6 position,  
25 mm diameter filters

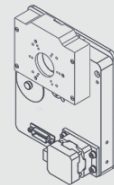
**HF108**  
Filter wheel, 8 position,  
32 mm diameter filters with stand

**HF108A**  
Filter wheel, 8 position,  
32 mm diameter filters, no stand



**HF202HT**  
25mm high temperature  
standalone shutter

**HF204HT**  
35mm high temperature  
standalone shutter



**HF110A + HF202HT**  
10 position 25 mm diameter  
filter wheel plus shutter  
combination

**HF108A + HF201HT**  
8 position 32 mm diameter  
filter wheel plus shutter  
combination



**HF235**  
Filter wheel adapter



**HF238**  
Shutter adapter  
for transmitted lamp

See the following pages for more product information.

# Evident/Olympus IX81 configuration guide

## Motorized XY stages and sample holders

All the sample holders listed are compatible with the H117P1I4 and H117E1I4. The frame size means the HLD117IX is not compatible with this microscope. At least one sample holder is required for each stage. The H117ACCM breadboard attachments can be added to all to provide mounting points for probe stations.

Part	Description
H117P1I4	ProScan inverted stage, part encoded, 1 mm pitch, 400 step, Evident/Olympus IX
H117E1I4	ProScan inverted stage, encoded, 1 mm pitch, 400 step, Evident/Olympus IX
H473XR	Universal sample holder (slides, Petri dishes, small flasks), extra recessed
H223XR	Extra recessed holder for micro titer plates (85x128mm) with diagonal corner sections removed
H224XRLP	Low profile 3 in x 1 in slide holder, extra recessed
H229XR	Universal Petri dish holder, extra recessed
H234XR	Four 3 in x 1 in slide holder, extra recessed
H23X200	200ml flask holder (Greiner)
H237XRLP	Low profile 3 in x 2 in slide holder, extra recessed
H229D35XR-6	Holder for 6 x 35mm Petri dishes
H649	Holder for a single 1 in, 1.25 in and 1.5 in mounted metallurgical specimen
H657	Holder for one mounted metallurgical specimen, 2 in diameter
H658	Holder for six mounted metallurgical specimens, 1.25 in diameter
H659	Holder for one mounted metallurgical specimen, 1.5 in diameter with 1, 2, 4 or 8 chambers

## Stage accessories

Part	Description
H117ACCM	Pair of stage extension wings for H117 stages, breadboard format with 6 mm tapped holes for mounting micromanipulators or other accessories

## Nanopositioning stages and sample holders

Nanopositioning stages require a suitable motorized stage for mounting. All Prior motorized stages listed in this guide are compatible. Please contact Prior Scientific if the microscope has another brand of motorized stage. Note that a sample holder from the nanopositioning stage section is required for use, and replaces the sample holder fitted to the motorized stage. Control of the nanopositioning stage via Evident/Olympus Software requires the use of the Evident/Olympus Realtime Controller.

Part	Description
QGSP400-D1	System SP400, 400 µm travel, and NPC-D-6110 controller
QGSP600-D1	System SP600, 600 µm travel, and NPC-D-6110 controller
QGSP800-D1	System SP800, 800 µm travel, and NPC-D-6110 controller
QGSP301XR	SP multiwell holder XR
QGSP302XR	SP universal sample holder XR
QGSP303XR	SP single slide holder suitable for 1 in x 3 in and 2 in x 3 in slides

## Objective positioners and adapters

When ordering ensure the correct part number is used to specify inverted calibration. Objective positioners require a threaded adapter in order to be fitted to the microscope nosepiece and the microscope objective. Evident/Olympus microscopes typically use RMS threads; please contact Prior Scientific if the nosepiece uses an alternative thread size. Some IX81 nosepieces have a raised lip surrounding the objective positions, which may clash with the objective positioner; a 15mm spacer can be added to clear the lip. Please note that the two objective positions adjacent to the objective positioner will not be usable due to space constraints; additional positions may be unusable on smaller nosepieces. A high load calibration is available for specialist heavy objectives. Control of the nanopositioning stage via Evident/Olympus Software requires the use of the Evident/Olympus Realtime Controller.

Part	Description
QGOP-400-INV-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-400-INV-HL-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QGOP-800-INV-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-800-INV-HL-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QG-OP-MIC-RMS	OP microscope adapter RMS
QG-OP-OBJ-RMS	OP objective adapter M32 x 0.75 to RMS
QG-OP-SPACE-RMS	RMS static objective spacer to align with OP-400 objective

## Motorized focus

The PS3H122OLM enables the motorized focus control to be handled via a Prior controller, for example when using a PF850 autofocus.

Part	Description
PS3H122OLM	Generic focus drive and adapter



## Autofocus

The PF850 is a standalone hardware autofocus. The PF203 kit is required for mounting. The PF200, PF209 and PF300 are required for setup and maintenance. The PF404 is required for use with piezo nanopositioning systems.

Part	Description
PF850	PF head, controller with digipot power supply, cables
PF850M	PF head - line mode, controller with digipot power supply, cables
PF213	IX81 PureFocus mounting kit
PF209	PureFocus setup sample slide
PF200	PureFocus setup camera alignment target type 1, RMS.DIA 0.8 x 36
PF300	PureFocus setup camera jig
PF404	Piezo cable for PF850 15D to BNC

## Illumination

The L200IX and L200SIX are recommended for fluorescence microscopy (see **datasheet** for details). The L200SIX has a built in shutter mechanism which can be controlled via a ProScan III controller, so a standalone shutter is not required. The L220IX and L220SIX are available for customers doing fluorescence imaging in the far-red. The LDB1030L requires a ProScan III controller for operation and is recommended if purchasing a H31XYZEF/V31XYZEF controller. 35 mm shutters and filter wheels are recommended for widefield applications.

Part	Description
L200SIX	L200 Standard box, lamp, light guide, shutter and Evident/Olympus IX Collimator
L200IX	L220 Standard box, lamp, light guide and Evident/Olympus IX Collimator
L220SIX	L220 Standard box, lamp, light guide, shutter and Evident/Olympus IX Collimator
L220IX	L220 Standard box, lamp, light guide and Evident/Olympus IX Collimator

## Excitation path

Filter wheels are not supplied with filters. For systems requiring a shutter and filter wheel it is recommended to buy one of the combinations listed below. The HF235 adapter is required for filter wheels and shutters in the main episcopic illumination pathway. The H238 adapter is required for filter wheels and shutters in the transmitted light path.

Part	Description
HF235	Filter wheel adapter for Evident/Olympus BX, IX and AX series microscopes
HF238	Shutter adapter for transmitted lamp
HF202HT	25 mm high temperature standalone shutter
HF204HT	35 mm high temperature standalone shutter
HF110A	Filter wheel, 10 position, 25 mm diameter filters without stand
HF110	Filter wheel, 10 position, 25 mm diameter filters with stand
HF106A	Filter wheel, 6 position, 25 mm diameter filters without stand
HF108A	Filter wheel, 8 position, 32 mm diameter filters without stand
HF108	Filter wheel, 8 position, 32 mm diameter filters with stand
HF110A + HF200HT	10 position 25 mm diameter filter wheel plus shutter combination
HF108A + HF201HT	8 position 32 mm diameter filter wheel plus shutter combination

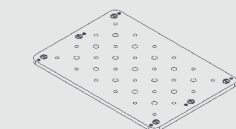
## Emission path

The HF236 adapter is required for fitting shutter and filter wheels to the emission port of the microscope.

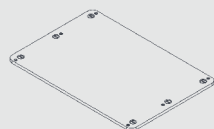
Part	Description
HF236	Filter wheel adapter for Evident/Olympus IX series microscopes
HF110	Filter wheel, 10 position, 25 mm diameter filters with stand
HF110A	Filter wheel, 10 position, 25 mm diameter filters without stand
HF106A	Filter wheel, 6 position, 25 mm diameter filters without stand

# Evident/Olympus BX41/BX51/ BX43/BX53 configuration chart

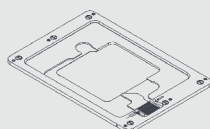
## 6 Sample holders



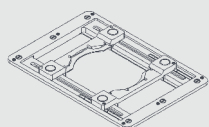
**H230B**  
Breadboard insert plate



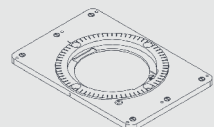
**H230**  
Solid stage plate



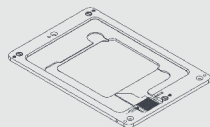
**H224LP**  
Low profile 3 in x 1 in slide holder



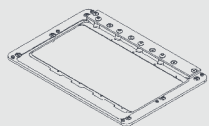
**H473UP**  
Universal sample holder



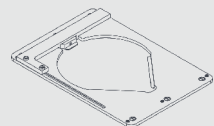
**H224ROT**  
3 in x 1 in manual rotating slide holder



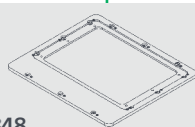
**H227LP**  
Low profile 3 in x 1 in slide holder



**H234LP**  
Low profile, four 3 in x 1 in slide holder



**H229UP**  
Universal Petri dish holder

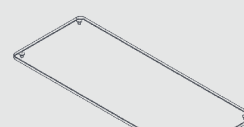


**H3848**  
Low profile slide holder adapter kit

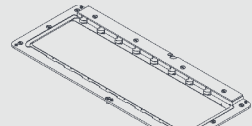
## 6 Sample holders



**H239**  
Solid stage plate

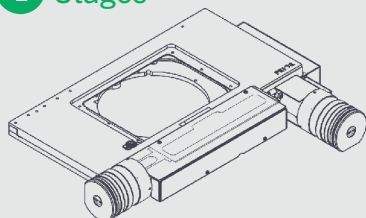


**H288**  
Glass stage plate



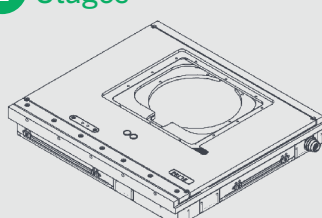
**H238LP**  
Low profile eight 3 in x 1 in slide holder

## 1 Stages



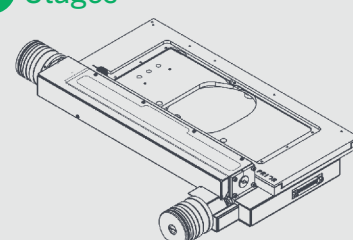
**H101BX, HE01BX,  
H1P4BX, HEP4BX**  
ProScan upright stage

## 1 Stages



**H101P2BX, H101E2BX,  
H101P1BX, H101E1BX**  
ProScan upright stage, flat top

## 1 Stages

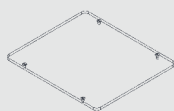


**H138BX, HE38BX**  
ProScan upright stage, large format

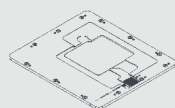
## 6 Stage accessories



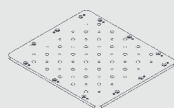
**H230F**  
Solid stage plate



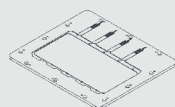
**H220F**  
Glass stage plate



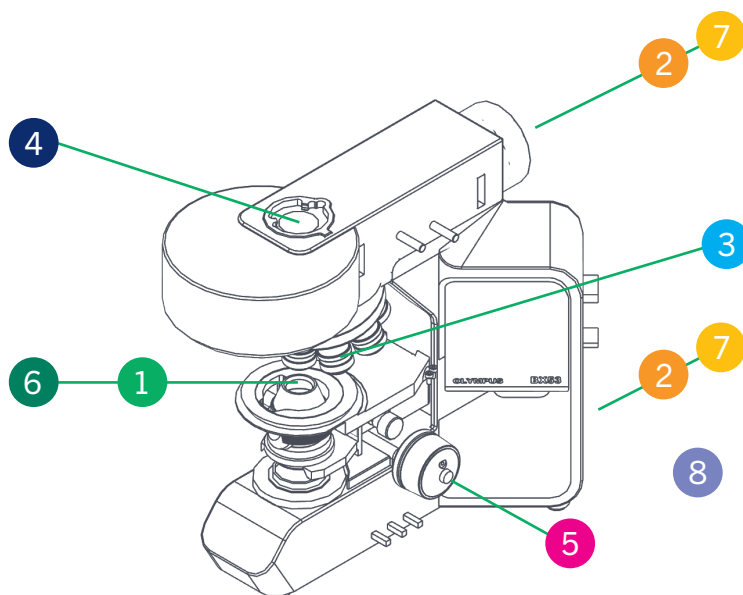
**H224F**  
Low profile 3 in x 1 in slide holder



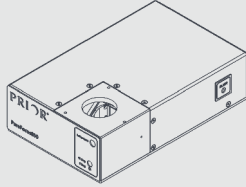
**H230FB**  
Breadboard stage insert assembly



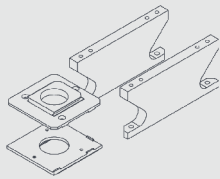
**H234F**  
Four 3 in x 1 in slide holder



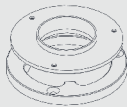
#### 4 Autofocus



**PF850**  
PF head, controller with  
digitpot power supply, cables

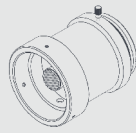


**PF210**  
Evident/Olympus BX fluorescence mounting  
kit



**LF335**  
PF850 flange set

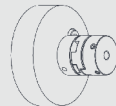
#### 5 Motorized focus



**PS3H122R**  
Generic focus drive and  
adapter

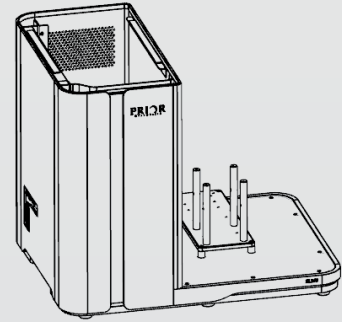


**H807**  
Focus sleeve



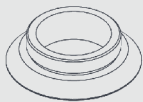
**H122KBIX**  
Direct fine focus coupling

#### 8 Robotic slide loader

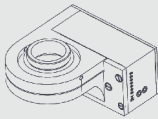


**SL160**  
SL160 with 2mm XY stage

#### 3 Objective positioner



**QG-OP-MIC-RMS**  
Microscope adapter

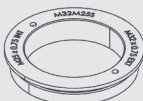


**QGOP-400-UP-D1**  
OP400 objective scanner  
system (0–500 g load)

**QGOP-400-UP-HL-D1**  
OP400 objective scanner  
system (500–1000 g load)

**QGOP-800-UP-D1**  
OP800 objective scanner  
system (0–500 g load)

**QGOP-800-UP-HL-D1**  
OP800 objective scanner  
system (500–1000 g load)

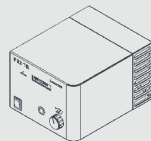


**QG-OP-OBJ-RMS**  
Objective adapter

#### 7 Illumination

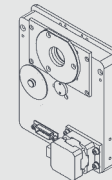


**L200SOL, L220SOL**  
Fluorescence illuminator,  
built in shutter

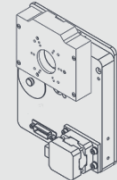


**L2000L, L2200L**  
Fluorescence illuminator

#### 2 Excitation path



**HF110A**  
Filter wheel, 10 position,  
25 mm diameter filters



**HF110A + HF200HT**  
10 position 25 mm diameter  
filter wheel plus shutter  
combination

**HF110**  
Filter wheel, 10 position,  
25 mm diameter filters with stand

**HF106A**  
Filter wheel, 6 position,  
25 mm diameter filters

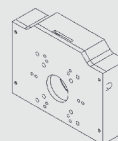
**HF108A + HF201HT**  
8 position 32 mm diameter  
filter wheel plus shutter  
combination

**HF108A**  
Filter wheel, 8 position,  
32 mm diameter filters



**HF235**  
Filter wheel adapter

**HF108**  
Filter wheel, 8 position,  
32 mm diameter filters with stand



**HF202HT**  
25mm high temperature  
standalone shutter

**HF204HT**  
35mm high temperature  
standalone shutter

See the following pages for more product information.

# Evident/Olympus BX41/BX51/BX43/ BX53 configuration guide

The Evident/Olympus BX41/BX51/BX43/BX53 are manual microscopes. Prior offers an extensive range of upgrades for these microscopes.

## Stages and sample holders

All the sample holders listed in the first section of the above table are compatible with the H101BX, HE01BX, H1P4BX, and HEP4BX. All the sample holders listed in the second section are compatible with the flat top H101P2BX, H101E2BX, H101P1BX and H101E1BX. In addition, sample holders from the first section are compatible with the flat top stage range when combined with the H3848. The large format H138BX and HE38BX can support up to 8 slides. It is advised to purchase the H238LP rather than the H238PLP unless the microscope is fitted with an immersion condenser.

## Motorized XY stages and sample holders

Part	Description
H101BX	ProScan upright stage, part encoded, 2 mm pitch, 200 step, Evident/Olympus BX
HE01BX	ProScan upright stage, encoded, 2 mm pitch, 200 step, Evident/Olympus BX
H1P4BX	ProScan upright stage, part encoded, 1 mm pitch, 400 step, Evident/Olympus BX
HEP4BX	ProScan upright stage, encoded, 1 mm pitch, 400 step, Evident/Olympus BX
H473UP	Universal sample holder (slides, Petri dishes, small flasks), upright
H224LP	Low profile 3 in x 1 in slide holder
H234LP	Low profile, four 3 in x 1 in slide holder
H237LP	Low profile 3 in x 2 in slide holder
H229UP	Universal Petri dish holder, upright stages, up to 90 mm diameter
H230	Solid stage plate, H101A stages
H224ROT	3 in x 1 in manual rotating slide holder
H230B	Breadboard insert plate M4 & M6 (H101)
H220	H101 glass stage plate assembly

## Flat top XY motorized stages and sample holders

Part	Description
H101P2BX	ProScan upright stage, flat top, part encoded, 2 mm pitch, 200 step, Evident/Olympus BX
H101E2BX	ProScan upright stage, flat top, encoded, 2 mm pitch, 200 step, Evident/Olympus BX
H101P1BX	ProScan upright stage, flat top, 1 mm pitch, 200 step, Evident/Olympus BX
H101E1BX	ProScan upright stage, flat top, encoded, 1 mm pitch, 200 step, Evident/Olympus BX
H3848	Low profile slide holder adapter kit for H101F
H230F	Solid stage plate, H101F Stages
H224F	Low profile 3 in x 1 in slide holder, extended, H101F stages
H234F	Four 3 in x 1 in slide holder, H101F stages
H220F	Glass stage plate, H101F stages
H230FB	Breadboard stage insert assembly (H101F)

## Large format XY motorized stages and sample holders

Part	Description
H138BX	ProScan upright stage, part encoded, 2 mm pitch, 200 step, Evident/Olympus BX, for up to 8 slides
HE38BX	ProScan upright stage, encoded, 2 mm pitch, 200 step, Evident/Olympus BX, for up to 8 slides
H238LP	Low profile eight 3 in x 1 in slide holder
H238PLP	Low profile eight 3 in x 1 in slide holder, part recessed
H239	Solid stage plate, H138 stages
H288	Glass stage plate, H138 stages

## Objective positioners and adapters

When ordering ensure the correct part number is used to specify upright calibration. Objective positioners require a threaded adapter in order to be fitted to the microscope nosepiece and the microscope objective. Evident/Olympus microscopes typically use RMS threads; please contact Prior Scientific if the nosepiece uses an alternative thread size. Some BX51/BX53 nosepieces have a raised lip surrounding the objective positions, which may clash with the objective positioner; a 15mm spacer can be added to clear the lip. Please note that the two objective positions adjacent to the objective positioner will not be usable due to space constraints; additional positions may be unusable on smaller nosepieces. A high load calibration is available for specialist heavy objectives. Control of the via Evident/Olympus Software requires the use of the Evident/Olympus Realtime Controller.

Part	Description
QGOP-400-UP-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-400-UP-HL-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QGOP-800-UP-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-800-UP-HL-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QG-OP-MIC-RMS	OP microscope adapter RMS
QG-OP-OBJ-RMS	OP objective adapter M32 x 0.75 to RMS
QG-OP-SPACE-RMS	RMS static objective spacer to align with OP-400 objective
QG-OP-MIC-W26	Microscope adapter W26 (M26 x 1/36")
QG-OP-OBJ-W26	Objective adapter W26 (M26 x 1/36")

## Motorized focus

The PS3H122R plus H807 combination is required to drive the fine focus knob of the microscope. The coarse focus will not be motorized. The H122KBIX direct coupling can be added for more precise motorized control.

Part	Description
PS3H122R	Generic focus drive and adapter with rotating cable system preventing cable twisting
H807	Evident/Olympus BX and IX focus sleeve
H122KBIX	Direct fine focus coupling for Evident/Olympus IX/BX microscopes

## Autofocus

The PF850 is a standalone hardware autofocus. The LF335 flange set is recommended for systems using only transmitted light or non-fluorescence reflected light. The PF210 kit is required for systems using fluorescence where the filter cubes will block 850nm wavelength light. The PF200, PF209 and PF300 are required for setup and maintenance. The PF404 is required for use with piezo nanopositioning systems.

Part	Description
PF850	PF head, controller with digipot power supply, cables
PF850M	PF head - line mode, controller with digipot power supply, cables
PF210	Evident/Olympus BX fluorescence mounting kit
LF335	F850 flange set (Evident/Olympus BX)
PF209	PureFocus setup sample slide
PF200	PureFocus setup camera alignment target type 1, RMS.DIA 0.8 x 36
PF300	PureFocus setup camera jig
PF404	Piezo cable for PF850 15D to BNC

## Illumination

The L2000L and L200SOL are recommended for fluorescence microscopy (see **datasheet** for details). The L200SOL has a built in shutter mechanism which can be controlled via a ProScan III controller, so a standalone shutter is not required. The L2200L and L220SOL are available for customers doing fluorescence imaging in the far-red. 35mm shutters and 32mm filter wheels are recommended for widefield applications. Note that no Prior option is available for diascopic illumination.

Part	Description
L200SOL	L200 Standard box, lamp, light guide, shutter and Evident/Olympus collimator
L2000L	L220 Standard box, lamp, light guide and Evident/Olympus collimator
L220SOL	L220 Standard box, lamp, light guide, shutter and Evident/Olympus collimator
L2200L	L220 Standard box, lamp, light guide and Evident/Olympus collimator



## Excitation path

Filter wheels are not supplied with filters. For systems requiring a shutter and filter wheel it is recommended to buy one of the combinations listed above. The HF235 adapter is required for filter wheels and shutters in the episcopic illumination pathways. Please note that the HF238 is not compatible with BX41, BX43 or BX53M microscopes.

Part	Description
HF235	Filter wheel adapter for Evident/Olympus BX, IX and AX series microscopes
HF238	Shutter adapter for transmitted lamp (not compatible with BX41/43)
HF202HT	25 mm high temperature standalone shutter
HF204HT	35 mm high temperature standalone shutter
HF110A	Filter wheel, 10 position, 25 mm diameter filters without stand
HF110	Filter wheel, 10 position, 25 mm diameter filters with stand
HF106A	Filter wheel, 6 position, 25 mm diameter filters without stand
HF108A	Filter wheel, 8 position, 32 mm diameter filters without stand
HF108	Filter wheel, 8 position, 32 mm diameter filters with stand
HF110A + HF200HT	10 position 25 mm diameter filter wheel plus shutter combination
HF108A + HF201HT	8 position 32 mm diameter filter wheel plus shutter combination

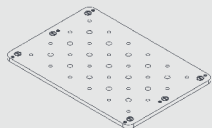
## Robotic slide loader

Please contact Prior Scientific to discuss integration of BX43 and BX53 microscopes with the SL160 slide loader. The SL160 is a development platform for high throughput microscopy and is not integrated with Evident/Olympus software.

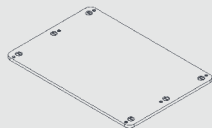
Part	Description
SL160	Slide loader, 160 slide capacity, for BX microscopes - Contact us for information

# Evident/Olympus BX61 configuration chart

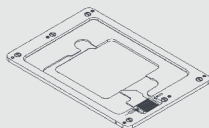
## 5 Sample holders



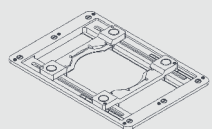
**H230B**  
Breadboard insert plate



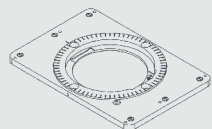
**H230**  
Solid stage plate



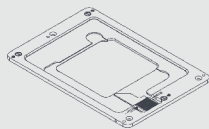
**H224LP**  
Low profile 3 in x 1 in slide holder



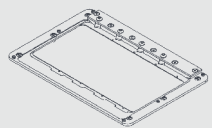
**H473UP**  
Universal sample holder



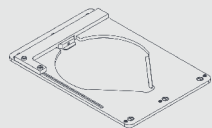
**H224ROT**  
3 in x 1 in manual rotating slide holder



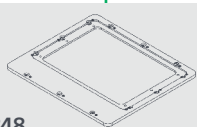
**H237LP**  
Low profile 3 in x 1 in slide holder



**H234LP**  
Low profile, four 3 in x 1 in slide holder

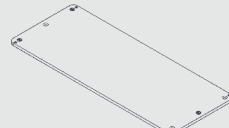


**H229UP**  
Universal Petri dish holder

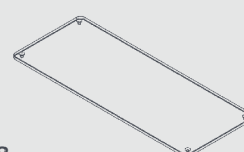


**H3848**  
Low profile slide holder adapter kit

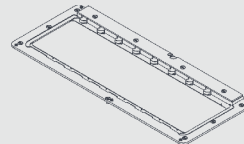
## 5 Sample holders



**H239**  
Solid stage plate

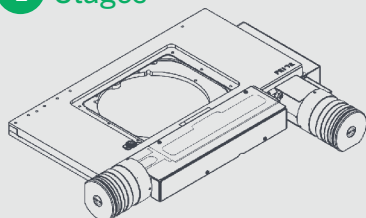


**H288**  
Glass stage plate



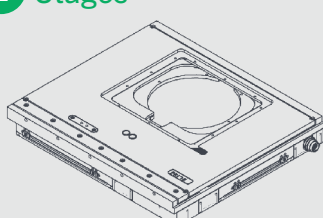
**H238LP**  
Low profile eight 3 in x 1 in slide holder

## 1 Stages



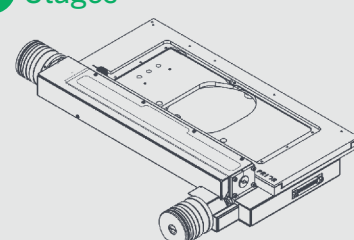
**H101BX, HE01BX,  
H1P4BX, HEP4BX**  
ProScan upright stage

## 1 Stages



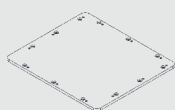
**H101P2BX, H101E2BX,  
H101P1BX, H101E1BX**  
ProScan upright stage, flat top

## 1 Stages



**H138BX, HE38BX**  
ProScan upright stage, large format

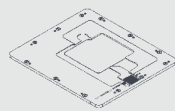
## 5 Sample holders



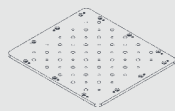
**H230F**  
Pair of stage extension wings



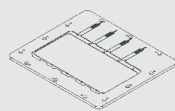
**H220F**  
Pair of stage extension wings



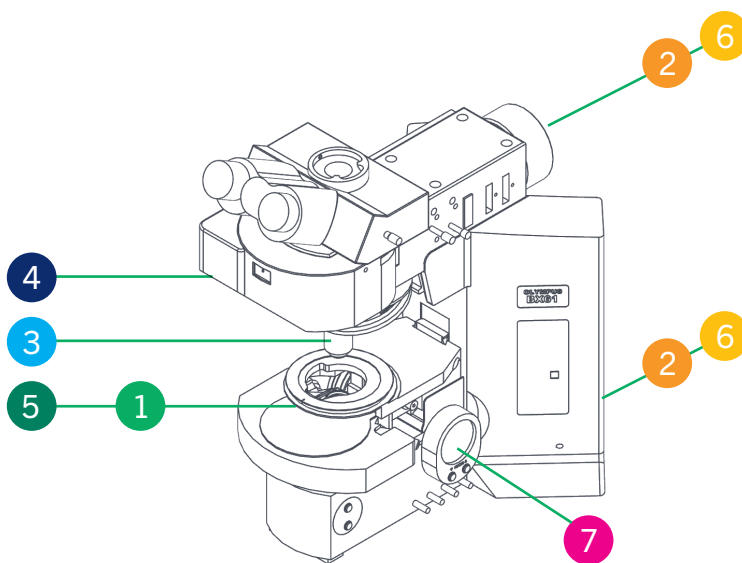
**H224F**  
Pair of stage extension wings



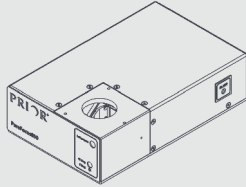
**H230FB**  
Pair of stage extension wings



**H234F**  
Pair of stage extension wings



## 4 Autofocus

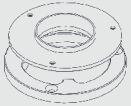


### PF850

PF head, controller with  
digipot power supply, cables

### PF850M

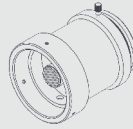
PF head - line mode, controller with  
digipot power supply, cables



### LF335

PF850 flange set

## 7 Motorized focus



### PS3H1220LM

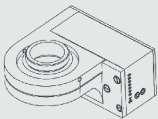
Generic focus drive and  
adapter

## 3 Objective positioner



### QG-OP-MIC-RMS

Microscope adapter



### QGOP-400-UP-D1

OP400 objective scanner  
system (0–500 g load)

### QGOP-400-UP-HL-D1

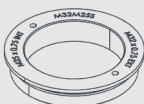
OP400 objective scanner  
system (500–1000 g load)

### QGOP-800-UP-D1

OP800 objective scanner  
system (0–500 g load)

### QGOP-800-UP-HL-D1

OP800 objective scanner  
system (500–1000 g load)



### QG-OP-OBJ-RMS

Objective adapter

## 6 Illumination



### L200SOL, L220SOL

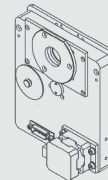
Fluorescence illuminator,  
built in shutter



### L200OL, L220OL

Fluorescence illuminator

## 2 Excitation path



### HF110A

Filter wheel, 10 position,  
25 mm diameter filters

### HF110

Filter wheel, 10 position,  
25 mm diameter filters with stand

### HF106A

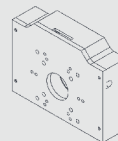
Filter wheel, 6 position,  
25 mm diameter filters

### HF108A

Filter wheel, 8 position,  
32 mm diameter filters

### HF108

Filter wheel, 8 position,  
32 mm diameter filters with stand

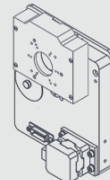


### HF202HT

25mm high temperature  
standalone shutter

### HF204HT

35mm high temperature  
standalone shutter



### HF110A + HF200HT

10 position 25 mm diameter  
filter wheel plus shutter  
combination

### HF108A + HF201HT

8 position 32 mm diameter  
filter wheel plus shutter  
combination



### HF235

Filter wheel adapter

See the following pages for more product information.

# Evident/Olympus BX61 configuration guide

The Evident/Olympus BX61 is a motorized microscope. Prior offers an extensive range of upgrades for this microscope.

## Stages and sample holders

All the sample holders listed in the first section of the above table are compatible with the H101BX, HE01BX, H1P4BX, and HEP4BX. All the sample holders listed in the second section are compatible with the flat top H101P2BX, H101E2BX, H101P1BX and H101E1BX. In addition, sample holders from the first section are compatible with the flat top stage range when combined with the H3848. The large format H138BX and HE38BX can support up to 8 slides.

## Motorized XY stages and sample holders

Part	Description
H101BX	ProScan upright stage, part encoded, 2 mm pitch, 200 step, Evident/Olympus BX
HE01BX	ProScan upright stage, encoded, 2 mm pitch, 200 step, Evident/Olympus BX
H1P4BX	ProScan upright stage, part encoded, 1 mm pitch, 400 step, Evident/Olympus BX
HEP4BX	ProScan upright stage, encoded, 1 mm pitch, 400 step, Evident/Olympus BX
H473UP	Universal Sample holder (slides, Petri dishes, small flasks), upright
H224LP	Low profile 3 in x 1 in slide holder
H234LP	Low profile, four 3 in x 1 in slide holder
H237LP	Low profile 3 in x 2 in slide holder
H229UP	Universal Petri dish holder, upright stages, up to 90 mm diameter
H230	Solid stage plate, H101A stages
H224ROT	3 in x 1 in manual rotating slide holder
H230B	Breadboard insert plate M4 & M6 (H101)
H220	H101 Glass stage plate assembly

## Flat top XY motorized stages and sample holders

Part	Description
H101P2BX	ProScan upright stage, flat top, part encoded, 2 mm pitch, 200 step, Evident/Olympus BX
H101E2BX	ProScan upright stage, flat top, encoded, 2 mm pitch, 200 step, Evident/Olympus BX
H101P1BX	ProScan upright stage, flat top, 1 mm pitch, 200 step, Evident/Olympus BX
H101E1BX	ProScan upright stage, flat top, encoded, 1 mm pitch, 200 step, Evident/Olympus BX
H3848	Low profile slide holder adapter kit for H101F
H230F	Solid stage plate, H101F Stages
H224F	Low profile 3 in x 1 in slide holder, extended, H101F stages
H234F	Four 3 in x 1 in slide holder, H101F stages
H220F	Glass stage plate, H101F stages
H230FB	Breadboard stage insert assembly (H101F)

## Large format XY motorized stages and sample holders

Part	Description
H138BX	ProScan upright stage, part encoded, 2 mm pitch, 200 step, Evident/Olympus BX, for up to 8 slides
HE38BX	ProScan upright stage, encoded, 2 mm pitch, 200 step, Evident/Olympus BX, for up to 8 slides
H238LP	Low profile eight 3 in x 1 in slide holder
H238PLP	Low profile eight 3 in x 1 in slide holder, part recessed
H239	Solid stage plate, H138 stages
H288	Glass stage plate, H138 stages

## Objective positioners and adapters

When ordering ensure the correct part number is used to specify upright calibration. Objective positioners require a threaded adapter in order to be fitted to the microscope nosepiece and the microscope objective. Evident/Olympus microscopes typically use RMS threads; please contact Prior Scientific if the nosepiece uses an alternative thread size. Some BX61 nosepieces have a raised lip surrounding the objective positions, which may clash with the objective positioner; a 15mm spacer can be added to clear the lip. Please note that the two objective positions adjacent to the objective positioner will not be usable due to space constraints; additional positions may be unusable on smaller nosepieces. A high load calibration is available for specialist heavy objectives. Control of the via Evident/Olympus Software requires the use of the Evident/Olympus Realtime Controller.

Part	Description
QGOP-400-UP-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-400-UP-HL-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QGOP-800-UP-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-800-UP-HL-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QG-OP-MIC-RMS	OP microscope adapter RMS
QG-OP-OBJ-RMS	OP objective adapter M32 x 0.75 to RMS
QG-OP-SPACE-RMS	RMS static objective spacer to align with OP-400 objective

## Motorized focus

The PS3H122OLM is directly coupled to the fine focus knob. It does not compete with the inherent motorized focus system.

Part	Description
PS3H122OLM	Focus drive assembly, PS3, Evident/Olympus BX61/IX81 PS3

## Autofocus

The PF850 is a standalone hardware autofocus. The LF335 flange set is recommended for systems using only transmitted light or non-fluorescence reflected light. Please contact Prior Scientific to provide information about fluorescence filter sets if using fluorescence. The PF200, PF209 and PF300 are required for setup and maintenance. The PF404 is required for use with piezo nanopositioning systems.

Part	Description
PF850	PF head, controller with digipot power supply, cables
PF850M	PF head - line mode, controller with digipot power supply, cables
PF210	Evident/Olympus BX fluorescence mounting kit
LF335	PF850 flange set (Evident/Olympus BX)
PF209	PureFocus setup sample slide
PF200	PureFocus setup camera alignment target type 1, RMS.DIA 0.8 x 36
PF300	PureFocus setup camera jig
PF404	Piezo cable for PF850 15D to BNC

## Illumination

The L2000L and L200SOL are recommended for fluorescence microscopy (see **datasheet** for details). The L200SOL has a built in shutter mechanism which can be controlled via a ProScan III controller, so a standalone shutter is not required. The L2200L and L220SOL are available for customers doing fluorescence imaging in the far-red.

Part	Description
L200SOL	L200 Standard box, lamp, light guide, shutter and Evident/Olympus collimator
L2000L	L220 Standard box, lamp, light guide and Evident/Olympus collimator
L220SOL	L220 Standard box, lamp, light guide, shutter and Evident/Olympus collimator
L2200L	L220 Standard box, lamp, light guide and Evident/Olympus collimator

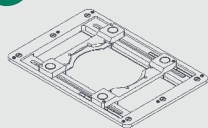
## Excitation path

Filter wheels are not supplied with filters. For systems requiring a shutter and filter wheel it is recommended to buy one of the combinations listed above. The HF235 adapter is required for filter wheels and shutters in the episcopic and diascope illumination pathways.

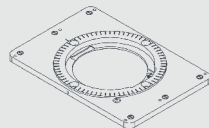
Part	Description
HF235	Filter wheel adapter for Evident/Olympus BX, IX and AX series microscopes
HF238	Shutter adapter for transmitted lamp
HF202HT	25 mm high temperature standalone shutter
HF204HT	35 mm high temperature standalone shutter
HF110A	Filter wheel, 10 position, 25 mm diameter filters without stand
HF110	Filter wheel, 10 position, 25 mm diameter filters with stand
HF106A	Filter wheel, 6 position, 25 mm diameter filters without stand
HF108A	Filter wheel, 8 position, 32 mm diameter filters without stand
HF108	8 position 32 mm diameter filter wheel plus shutter combination with stand
HF110A + HF200HT	10 position 25 mm diameter filter wheel plus shutter combination
HF108A + HF201HT	8 position 32 mm diameter filter wheel plus shutter combination

# Evident/Olympus BX63 configuration chart

## 5 Sample holders



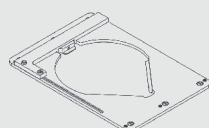
**H473UP\***  
Universal sample holder



**H224ROT\***  
3 in x 1 in manual rotating slide holder



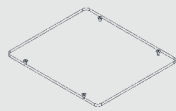
**H237LP\***  
Low profile 3 in x 1 in slide holder



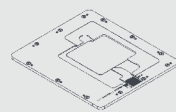
**H229UP\***  
Universal Petri dish holder



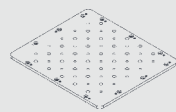
**H230F**  
Solid stage plate



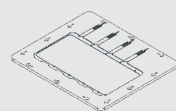
**H220F**  
Glass stage plate



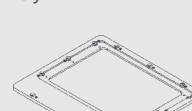
**H224F**  
Low profile 3 in x 1 in slide holder



**H230FB**  
Breadboard stage insert assembly



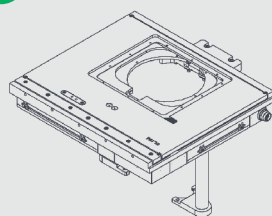
**H234F**  
Four 3 in x 1 in slide holder



**H3848**  
Low profile slide holder adapter kit

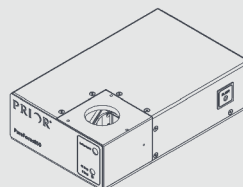
\*Requires H3848 adapter plate

## 1 Stages



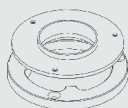
**H101P2B3, H101E2B3,  
H101P1B3, H101E1B3**  
ProScan upright stage, flat top

## 4 Autofocus



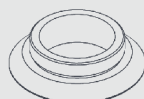
**PF850**  
PF head, controller with digipot power supply, cables

**PF850M**  
PF head - line mode, controller with digipot power supply, cables

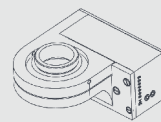


**LF335**  
PF850 flange set

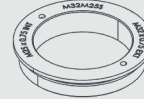
## 3 Objective positioner



**QG-OP-MIC-RMS**  
Microscope adapter



**QGOP-400-UP-D1**  
OP400 objective scanner system (0–500 g load)



**QG-OP-OBJ-RMS**  
Objective adapter

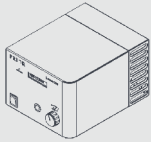
**QGOP-400-UP-HL-D1**  
OP400 objective scanner system (500–1000 g load)

**QGOP-800-UP-D1**  
OP800 objective scanner system (0–500 g load)

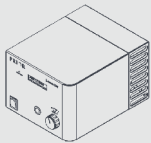
**QGOP-800-UP-HL-D1**  
OP800 objective scanner system (500–1000 g load)



## 6 Illumination

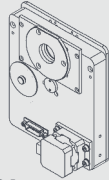


**L200SOL, L220SOL**  
Fluorescence illuminator,  
built in shutter

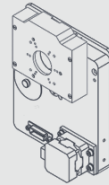


**L2000L, L2200L**  
Fluorescence illuminator

## 2 Excitation path



**HF110A**  
Filter wheel, 10 position,  
25 mm diameter filters



**HF110A + HF200HT**  
10 position 25 mm diameter  
filter wheel plus shutter  
combination

**HF110**  
Filter wheel, 10 position,  
25 mm diameter filters with stand

**HF108A + HF201HT**  
8 position 32 mm diameter  
filter wheel plus shutter  
combination

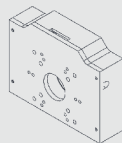
**HF106A**  
Filter wheel, 6 position,  
25 mm diameter filters



**HF108A**  
Filter wheel, 8 position,  
32 mm diameter filters

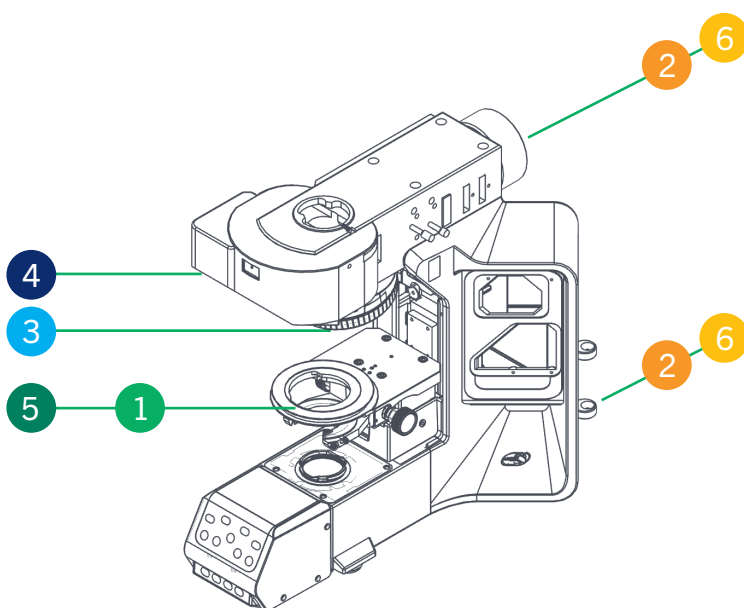
**HF108**  
Filter wheel, 8 position,  
32 mm diameter filters with stand

**HF235**  
Filter wheel adapter



**HF202HT**  
25mm high temperature  
standalone shutter

**HF204HT**  
35mm high temperature  
standalone shutter



See the following pages for more product information.

# Evident/Olympus BX63 configuration guide

The Evident/Olympus BX63 is a fully motorized microscope. While this microscope is well equipped, Prior Scientific can offer cost effective, high performance upgrades.

## Flat top XY motorized stages and sample holders

The BX63 lacks the typical dovetail stage attachment of other BX upright microscopes. The H101P2B3, H101E2B3, H101P1B3 and H101E1B3 are fitted with pillars that can be fitted to the microscope frame. The stages listed have superior travel range (114x75 mm) to the standard BX63 stage.

Part	Description
H101P2B3	ProScan upright stage, flat top, part encoded, 2 mm pitch, 200 step, Evident/Olympus BX
H101E2B3	ProScan upright stage, flat top, encoded, 2mm pitch, 200 step, Evident/Olympus BX
H101P1B3	ProScan upright stage, flat top, 1mm pitch, 200 step, Evident/Olympus BX
H101E1B3	ProScan upright stage, flat top, encoded, 1mm pitch, 200 step, Evident/Olympus BX
H3848	Low profile slide holder adapter kit for H101F
H473UP*	Universal sample holder (slides, Petri dishes, small flasks), upright
H237LP*	Low profile 3 in x 2 in slide holder
H229UP*	Universal Petri dish holder, upright stages, up to 90 mm diameter
H224ROT*	3 in x 1 in manual rotating slide holder
H230F	Solid stage plate, H101F stages
H224F	Low profile 3 in x 1 in slide holder, extended, H101F stages
H234F	Four 3 in x 1 in slide holder, H101F stages
H220F	Glass stage plate, H101F stages
H230FB	Breadboard stage insert assembly (H101F)

\*Requires the H3848 adapter for use.

## Objective positioners and adapters

When ordering ensure the correct part number is used to specify upright calibration. Objective positioners require a threaded adapter in order to be fitted to the microscope nosepiece and the microscope objective. Evident/Olympus microscopes typically use RMS threads; please contact Prior Scientific if the nosepiece uses an alternative thread size. Some BX63 nosepieces have a raised lip surrounding the objective positions, which may clash with the objective positioner; a 15 mm spacer can be added to clear the lip. Please specify the nosepiece attachment fitted to the microscope when ordering. Please note that the two objective positions adjacent to the objective positioner will not be usable due to space constraints; additional positions may be unusable on smaller nosepieces. A high load calibration is available for specialist heavy objectives. Control of the via Evident/Olympus Software requires the use of the Evident/Olympus Realtime Controller.

Part	Description
QGOP-400-UP-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-400-UP-HL-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QG-OP-MIC-RMS	OP microscope adapter RMS
QG-OP-OBJ-RMS	OP objective adapter RMS
QG-OP-SPACE-RMS	RMS static objective spacer to align with OP-400 objective

## Autofocus

The PF850 is a standalone hardware autofocus. The LF335 flange set is recommended for systems using only transmitted light or non-fluorescence reflected light. The PF210 kit is required for systems using fluorescence where the filter cubes will block 850 nm wavelength light. The PF200, PF209 and PF300 are required for setup and maintenance. The PF404 is required for use with piezo nanopositioning systems. Please note that the PF850 can only be used with piezo focus devices when combined with the BX63.

Part	Description
PF850	PF head, controller with digipot power supply, cables
PF850M	PF head - line mode, controller with digipot power supply, cables
PF210	Evident/Olympus BX fluorescence mounting kit
LF335	PF850 flange set (Evident/Olympus BX)
PF209	PureFocus setup sample slide
PF200	PureFocus setup camera alignment target type 1, RMS.DIA 0.8 x 36
PF300	PureFocus setup camera jig
PF404	Piezo cable for PF850 15D to BNC

## Illumination

The L2000L and L200SOL are recommended for fluorescence microscopy (see **datasheet** for details). The L200SOL has a built in shutter mechanism which can be controlled via a ProScan III controller, so a standalone shutter is not required. The L2200L and L220SOL are available for customers doing fluorescence imaging in the far-red. 35 mm shutters and 32 mm filter wheels are recommended for widefield applications.

Part	Description
L200SOL	L200 Standard box, lamp, light guide, shutter and Evident/Olympus collimator
L2000L	L220 Standard box, lamp, light guide and Evident/Olympus collimator
L220SOL	L220 Standard box, lamp, light guide, shutter and Evident/Olympus collimator
L2200L	L220 Standard box, lamp, light guide and Evident/Olympus collimator

## Excitation path

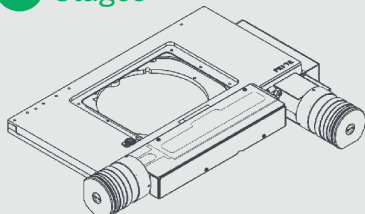
Filter wheels are not supplied with filters. Contact Prior Scientific if you wish to purchase a filter wheel stand that can be fixed to an optical table. For systems requiring a shutter and filter wheel it is recommended to buy one of the combinations listed above. The HF235 adapter is required for filter wheels and shutters in the episcopic and diascope illumination pathways and requires part U-LH100ADP from Evident/Olympus.

Part	Description
HF235	Filter wheel adapter for Evident/Olympus BX series microscopes. Requires U-LH100ADP from Evident/Olympus
HF238	Shutter adapter for transmitted lamp
HF202HT	25 mm high temperature standalone shutter
HF204HT	35 mm high temperature standalone shutter
HF110A	Filter wheel, 10 position, 25 mm diameter filters without stand
HF110	Filter wheel, 10 position, 25 mm diameter filters with stand
HF106A	Filter wheel, 6 position, 25 mm diameter filters without stand
HF108A	Filter wheel, 8 position, 32 mm diameter filters without stand
HF108	Filter wheel, 8 position, 32 mm diameter filters with stand
HF110A + HF200HT	10 position 25 mm diameter filter wheel plus shutter combination
HF108A + HF201HT	8 position 32 mm diameter filter wheel plus shutter combination



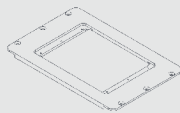
# Evident/Olympus BX51WI/ BX61WI configuration chart

## 1 Stages



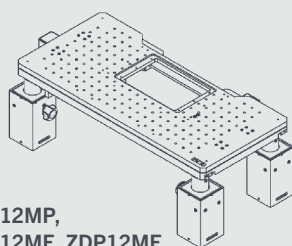
**H101BXWI**  
ProScan upright stage

## 7 Nanopositioning sample holders



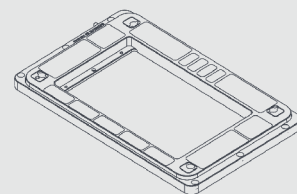
**QGSPADAPT110X160**  
Adapter plate for H101 sample holders

## 1 Stages



**ZDP12MP,  
ZDP12ME, ZDP12MF**  
ZDeck stages

## 7 Nanopositioning stages

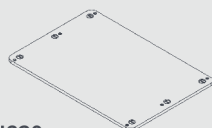


**QGSP400-D1  
QGSP600-D1  
QGSP800-D1**

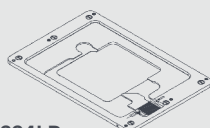
## 5 Sample holders



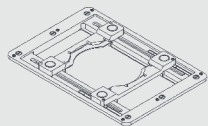
**H230B**  
Breadboard insert plate



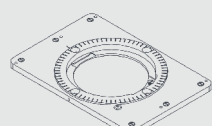
**H230**  
Solid stage plate



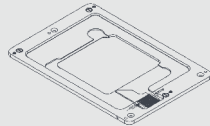
**H224LP**  
Low profile 3 in x 1 in slide holder



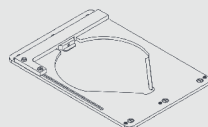
**H473UP**  
Universal sample holder



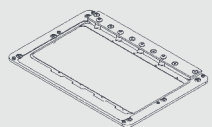
**H224ROT**  
3 in x 1 in manual rotating slide holder



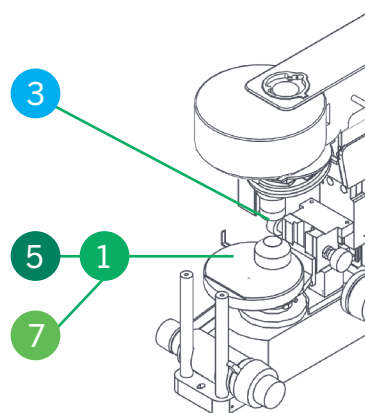
**H237LP**  
Low profile 3 in x 1 in slide holder



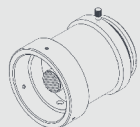
**H229UP**  
Universal Petri dish holder



**H234LP**  
Low profile, four 3 in x 1 in slide holder



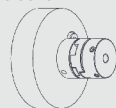
## 4 Motorized focus - BX51WI only



**PS3H122R**  
Generic focus drive and adapter

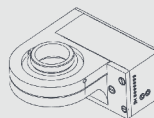


**H807**  
Focus sleeve

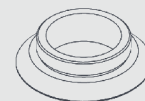


**H122KBIX**  
Direct fine focus coupling

## 3 Objective positioner

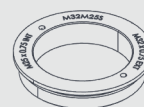


**QGOP-400-UP-D1**  
OP400 objective scanner system (0–500 g load)



**QG-OP-MIC-RMS**  
Microscope adapter

**QGOP-400-UP-HL-D1**  
OP400 objective scanner system (500–1000 g load)

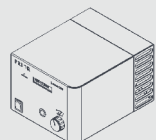


**QG-OP-OBJ-RMS**  
Objective adapter

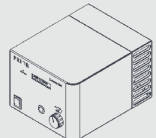
**QGOP-800-UP-D1**  
OP800 objective scanner system (0–500 g load)

**QGOP-800-UP-HL-D1**  
OP800 objective scanner system (500–1000 g load)

## 6 Illumination

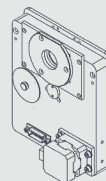


**L200SOL, L220SOL**  
Fluorescence illuminator, built in shutter



**L2000L, L2200L**  
Fluorescence illuminator

## 2 Excitation path



**HF110A**  
Filter wheel, 10 position, 25 mm diameter filters



**HF110A + HF202HT**  
10 position 25 mm diameter filter wheel plus shutter combination

**HF110**  
Filter wheel, 10 position, 25 mm diameter filters on stand

**HF108A + HF201HT**  
8 position 32 mm diameter filter wheel plus shutter combination

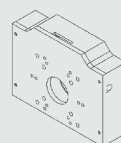
**HF106A**  
Filter wheel, 6 position, 25 mm diameter filters

**HF108A**  
Filter wheel, 8 position, 32 mm diameter filters

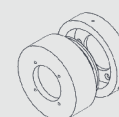


**HF235**  
Filter wheel adapter

**HF108**  
Filter wheel, 8 position, 32 mm diameter filters on stand



**HF202HT**  
25mm high temperature standalone shutter



**HF238**  
Shutter adapter for transmitted lamp

**HF204HT**  
35mm high temperature standalone shutter

See the following pages for more product information.

# Evident/Olympus BX51WI/ BX61WI configuration guide

The Evident/Olympus BX51WI/BX61WI is designed for electrophysiology. Prior can motorize many aspects of this microscope.

## Stages and sample holders

At least one sample holder is required for use with each stage. The H101BXWI stage requires that the BX51WI or BX61WI microscope be fitted with the WI-STAD adapter, which is typically used with the U-SVL(R)B-4 stages. Please contact Prior Scientific if your microscope is fitted with the WI-FSH pillar mounts, which are typically used with the IX-SVL2 mechanical stage.

## Motorized XY stage and sample holders

Part	Description
H101BXWI	ProScan upright stage for Evident/Olympus BX51WI/BX61WI
H473UP	Universal sample holder (slides, Petri dishes, small flasks), upright
H224LP	Low profile 3 in x 1 in slide holder
H234LP	Low profile, four 3 in x 1 in slide holder
H237LP	Low profile 3 in x 2 in slide holder
H229UP	Universal Petri dish holder, upright stages, up to 90 mm diameter
H230	Solid stage plate, H101A stages
H224ROT	3 in x 1 in manual rotating slide holder
H230B	Breadboard insert plate M4 & M6 (H101)
H220	H101 Glass stage plate assembly



## ZDeck stages and sample holders

Part	Description
ZDP12MP	ZDeck, Evident/Olympus, 2 mm pitch, 200 step, motorized
ZDP12ME	ZDeck, Evident/Olympus, 2 mm pitch, 200 step, motorized, encoded
ZDP12MF	ZDeck, Evident/Olympus, fixed
H224LP	Low profile 3 in x 1 in slide holder
H234LP	Low profile, four 3 in x 1 in slide holder
H237LP	Low profile 3 in x 2 in slide holder
H229UP	Universal Petri dish holder, upright stages, up to 90 mm diameter
H230	Solid stage plate, H101A stages
H224ROT	3 in x 1 in manual rotating slide holder
H230B	Breadboard insert plate M4 & M6 (H101)
H220	H101 glass stage plate assembly

## Nanopositioning stages and sample holders

Nanopositioning stages require a suitable motorized stage for mounting. All Prior motorized stages listed in this guide are compatible. Please contact Prior Scientific if the microscope has another brand of motorized stage. Note that a sample holder from the nanopositioning stage section is required for use, and replaces the sample holder fitted to the motorized stage. Please discuss the use of a nanopositioning stage with Prior Scientific when placing your order if using a rotary nosepiece.

Part	Description
QGSP400-D1	System SP400, 400 $\mu$ m travel, and NPC-D-6110 controller
QGSP600-D1	System SP600, 600 $\mu$ m travel, and NPC-D-6110 controller
QGSP800-D1	System SP800, 800 $\mu$ m travel, and NPC-D-6110 controller
QGSPADAPT110X160	Adapter plate for H101 sample holders

## Objective positioners and adapters

When ordering ensure the correct part number is used to specify upright calibration. Objective positioners require a threaded adapter in order to be fitted to the microscope nosepiece and the microscope objective. Evident/Olympus microscopes typically use RMS threads; please contact Prior Scientific if the nosepiece uses an alternative thread size. Some BX51WI/BX61WI nosepieces have a raised lip surrounding the objective positions, which may clash with the objective positioner; a 15 mm spacer can be added to clear the lip. Please specify the nosepiece attachment fitted to the microscope when ordering. Please note that the two objective positions adjacent to the objective positioner will not be usable due to space constraints; additional positions may be unusable on smaller nosepieces. A high load calibration is available for specialist heavy objectives. Control of the via Evident/Olympus Software requires the use of the Evident/Olympus Realtime Controller.

Part	Description
QGOP-400-UP-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-400-UP-HL-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QGOP-800-UP-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-800-UP-HL-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QG-OP-MIC-RMS	OP microscope adapter RMS
QG-OP-OBJ-RM	OP objective adapter M32 x 0.75 to RMS
QG-OP-SPACE-RMS	RMS static objective spacer to align with OP-400 objective

## Motorized focus

The PS3H122R plus H807 combination is required to drive the fine focus knob of the microscope. The coarse focus will not be motorized. The H122KBIX direct coupling can be added for more precise motorized control. Please note that the PS3H122R is only compatible with the BX51WI.

Part	Description
PS3H122R	Generic focus drive and adapter with rotating cable system preventing cable twisting
H807	Evident/Olympus BX and IX focus sleeve
H122KBIX	Direct fine focus coupling for Evident/Olympus IX/BX microscopes

## Autofocus

The PF850 is a standalone hardware autofocus. The LF335 flange set is recommended for systems using only transmitted light or non-fluorescence reflected light. The PF210 kit is required for systems using fluorescence where the filter cubes will block 850 nm wavelength light. The PF200, PF209 and PF300 are required for setup and maintenance. The PF404 is required for use with piezo nanopositioning systems.

Part	Description
PF850	PF head, controller with digipot power supply, cables
PF850M	PF head - line mode, controller with digipot power supply, cables
PF210	Evident/Olympus BX fluorescence mounting kit
LF335	PF850 flange set (Evident/Olympus BX)
PF209	PureFocus setup sample slide
PF200	PureFocus setup camera alignment target type 1, RMS.DIA 0.8 x 36
PF300	PureFocus setup camera jig
PF404	Piezo cable for PF850 15D to BNC

## Illumination

The L2000L and L200SOL are recommended for fluorescence microscopy (see **datasheet** for details). The L200SOL has a built in shutter mechanism which can be controlled via a ProScan III controller, so a standalone shutter is not required. The L2200L and L220SOL are available for customers doing fluorescence imaging in the far-red.

Part	Description
L200SOL	L200 Standard box, lamp, light guide, shutter and Evident/Olympus collimator
L2000L	L220 Standard box, lamp, light guide and Evident/Olympus collimator
L220SOL	L220 Standard box, lamp, light guide, shutter and Evident/Olympus collimator
L2200L	L220 Standard box, lamp, light guide and Evident/Olympus collimator

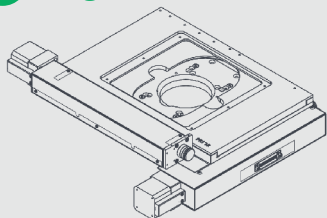
## Excitation path

Filter wheels are not supplied with filters. Contact Prior Scientific if you wish to purchase a filter wheel stand that can be fixed to an optical table. For systems requiring a shutter and filter wheel it is recommended to buy one of the combinations listed above. The HF235 adapter is required for filter wheels and shutters in the episcopic and diascope illumination pathways.

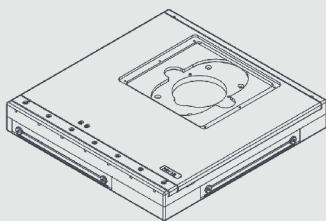
Part	Description
HF235	Filter wheel adapter for Evident/Olympus BX, IX and AX series microscopes
HF238	Shutter adapter for transmitted lamp
HF202HT	25 mm high temperature standalone shutter
HF204HT	35 mm high temperature standalone shutter
HF110A	Filter wheel, 10 position, 25 mm diameter filters without stand
HF110	Filter wheel, 10 position, 25 mm diameter filters with stand
HF106A	Filter wheel, 6 position, 25 mm diameter filters without stand
HF108A	8 position 32 mm diameter filter wheel plus shutter combination without stand
HF108	8 position 32 mm diameter filter wheel plus shutter combination with stand
HF110A + HF200HT	10 position 25 mm diameter filter wheel plus shutter combination
HF108A + HF201HT	8 position 32 mm diameter filter wheel plus shutter combination

# Evident/Olympus MX50/MX51 configuration chart

## 1 Stages

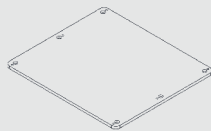


**H105/20L, HE05/20L**  
ProScan stage

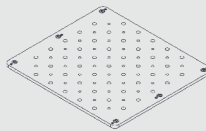


**H105N20L, H105E20L**  
ProScan stage

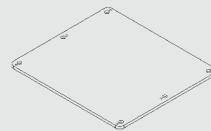
## 6 Sample holders



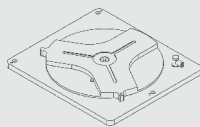
**H227**  
Glass stage plate assembly



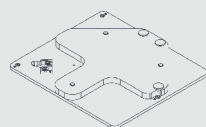
**H231B**  
Breadboard stage insert assembly



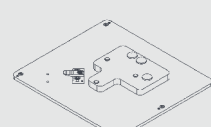
**H231**  
Aluminum stage plate assembly



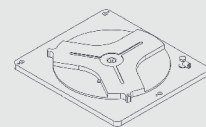
**HWC15V**  
Wafer chuck rot + vac 150 mm



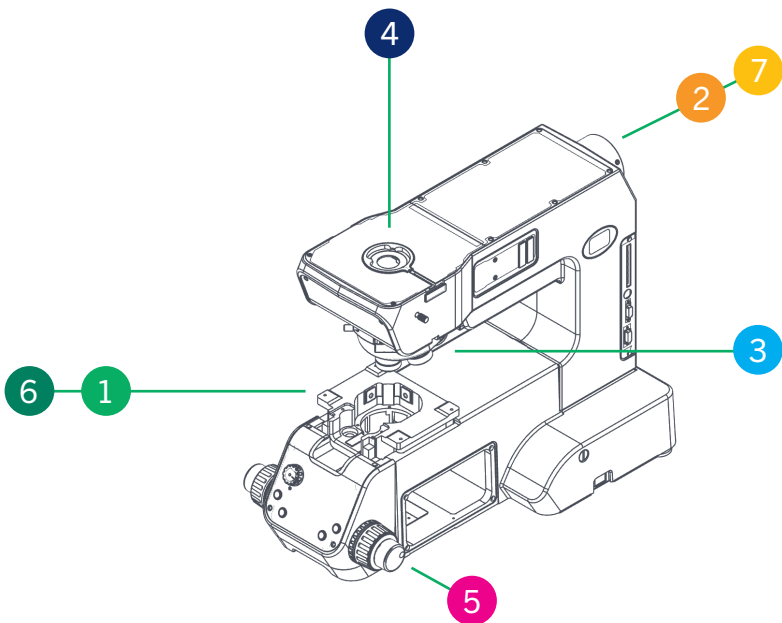
**H146**  
Wafer chuck, 150 mm sprung



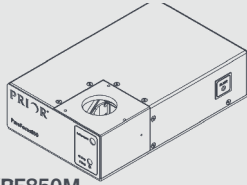
**H143**  
Wafer chuck spring loaded 3 in



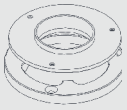
**HWC15S**  
Wafer chuck (4 in & 6 in wafers)



## 4 Autofocus

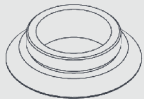


**PF850 / PF850M**  
PF head, controller with  
digipot power supply, cables

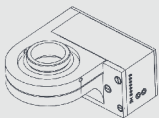


**LF335**  
PF850 flange set

## 3 Objective positioner



**QG-OP-MIC-RMS**  
Microscope adapter

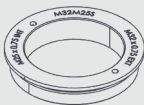


**QGOP-400-UP-D1**  
OP400 objective scanner  
system (0–500 g load)

**QGOP-400-UP-HL-D1**  
OP400 objective scanner  
system (500–1000 g load)

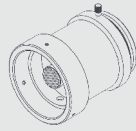
**QGOP-800-UP-D1**  
OP800 objective scanner  
system (0–500 g load)

**QGOP-800-UP-HL-D1**  
OP800 objective scanner  
system (500–1000 g load)



**QG-OP-OBJ-RMS**  
Objective adapter

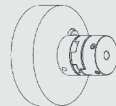
## 5 Motorized focus



**PS3H122R**  
Generic focus drive and  
adapter



**H807**  
Focus sleeve

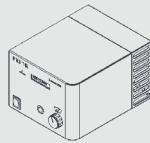


**H122KBIX**  
Direct fine focus coupling

## 7

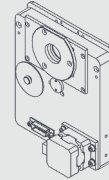


**L200SOL, L220SOL**  
Fluorescence illuminator,  
built in shutter



**L2000L, L2200L**  
Fluorescence illuminator

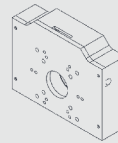
## 2 Excitation path



**HF108A**  
Filter wheel, 8 position,  
32 mm diameter filters



**HF235**  
Filter wheel adapter



**HF204HT**  
35mm high temperature  
standalone shutter

See the following pages for more product information.

# Evident/Olympus MX50/MX51 configuration guide

The Evident/Olympus MX50 and MX51 are microscopes designed for semiconductor analysis.

## Stages and sample holders

The H105/20L, HE05/20L, H105N20L and H105E20L are the largest stages available for this microscope due to its throat distance. The H105N20L and H105E20L feature a flat top design for easy loading. All sample holders listed are compatible with all types of stage. The HWC15V is fitted with a vacuum nozzle but no vacuum pump system is supplied.

## Motorized XY stages and sample holders for up to 6 inch diameter wafers

Part	Description
H105/20L	ProScan stage, 154x154 mm travel, part encoded, 2 mm pitch, 200 step, Evident/Olympus
HE05/20L	ProScan stage, 154x154 mm travel, encoded, 2 mm pitch, 200 step, Evident/Olympus
H105N20L	ProScan stage, 154x154 mm travel, non-encoded, 2 mm pitch, 200 step, Evident/Olympus
H105E20L	ProScan stage, 154x154 mm travel, encoded, 2 mm pitch, 200 step, Evident/Olympus
H227	H105 glass stage plate assembly
H231	H105 aluminum stage plate assembly
H231B	Breadboard stage insert assembly (H105)
H143	Wafer chuck spring loaded 3 in
H146	Wafer chuck, 150 mm sprung, H105 stages
HWC15S	H105 wafer chuck (4" & 6" wafers)
HWC15V	Wafer chuck rot+vac 150 mm/H105

## Objective positioners and adapters

When ordering ensure the correct part number is used to specify upright calibration. Objective positioners require a threaded adapter in order to be fitted to the microscope nosepiece and the microscope objective. Evident/Olympus microscopes typically use RMS threads; please contact Prior Scientific if the nosepiece uses an alternative thread size. Some MX50 nosepieces have a raised lip surrounding the objective positions, which may clash with the objective positioner; a 15 mm spacer can be added to clear the lip. Please specify the nosepiece attachment fitted to the microscope when ordering. Please note that the two objective positions adjacent to the objective positioner will not be usable due to space constraints; additional positions may be unusable on smaller nosepieces. A high load calibration is available for specialist heavy objectives. Control of the objective positioner via Evident/Olympus Software requires the use of the Evident/Olympus Realtime Controller.

Part	Description
QGOP-400-UP-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-400-UP-HL-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QGOP-800-UP-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-800-UP-HL-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QG-OP-MIC-RMS	OP microscope adapter RMS
QG-OP-MIC-W26	OP microscope adapter M26
QG-OP-OBJ-RMS	OP objective adapter M32 x 0.75 to RMS
QG-OP-OBJ-W26	OP objective adapter M26
QG-OP-SPACE-RMS	RMS static objective spacer to align with OP-400 objective

## Motorized focus

The PS3H122R plus H807 combination is required to drive the fine focus knob of the microscope. The coarse focus will not be motorized. The H122KBIX direct coupling can be added for more precise motorized control.

Part	Description
PS3H122R	Generic focus drive and adapter with rotating cable system preventing cable twisting
H807	Evident/Olympus BX and IX focus sleeve.
H122KBIX	Direct fine focus coupling for Evident/Olympus IX/BX microscopes.

## Autofocus

The PF850 is a standalone hardware autofocus. The LF335 flange set is recommended for systems using only transmitted light or non-fluorescence reflected light. The PF200, PF209 and PF300 are required for setup and maintenance. The PF404 is required for use with piezo nanopositioning systems.

Part	Description
PF850	PF head, controller with digipot power supply, cables
PF850M	PF head - line mode, controller with digipot power supply, cables
LF335	PF850 flange set (Evident/Olympus BX)
PF209	PureFocus setup sample slide
PF200	PureFocus setup camera alignment target type 1, RMS.DIA 0.8 x 36
PF200	PureFocus setup camera jig
PF404	Piezo cable for PF850 15D to BNC

## Illumination

The L200OL and L200SOL are recommended for fluorescence microscopy (see [datasheet](#) for details). The L200SOL has a built in shutter mechanism which can be controlled via a ProScan III controller, so a standalone shutter is not required. The L220OL and L220SOL are available for customers doing fluorescence imaging in the far-red.

Part	Description
L200SOL	L200 standard box, lamp, light guide, shutter and Evident/Olympus collimator
L200OL	L220 standard box, lamp, light guide and Evident/Olympus collimator
L220SOL	L220 standard box, lamp, light guide, shutter and Evident/Olympus collimator
L220OL	L220 standard box, lamp, light guide and Evident/Olympus collimator

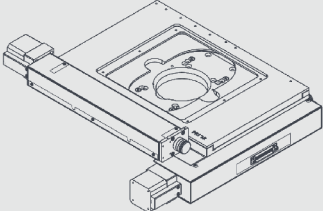
## Excitation path

Filter wheels are not supplied with filters. Contact Prior Scientific if you wish to purchase a filter wheel stand that can be fixed to an optical table. For systems requiring a shutter and filter wheel it is recommended to buy one of the combinations listed above. The HF235 adapter is required for filter wheels and shutters in the episcopic and diascope illumination pathways.

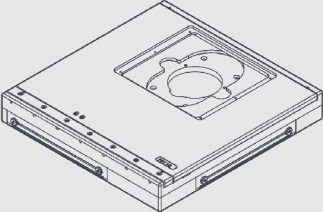
Part	Description
HF235	Filter wheel adapter for Evident/Olympus BX, IX and AX series microscopes
HF204HT	35 mm high temperature standalone shutter
HF108A	8 position 32 mm diameter filter wheel plus shutter combination without stand

# Evident/Olympus MX61/MX63 configuration chart

1
Stages

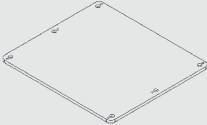


**H105/20L, HE05/20L**  
ProScan stage for up to 6 inch diameter wafers

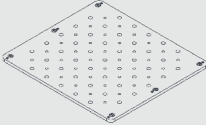


**H105N20L, H105E20L**  
ProScan stage for up to 6 inch diameter wafers

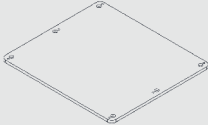
6
Sample holders



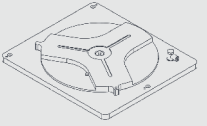
**H227**  
Glass stage plate assembly



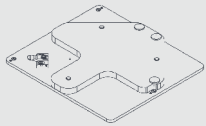
**H231B**  
Breadboard stage insert assembly



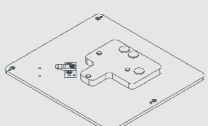
**H231**  
Aluminum stage plate assembly



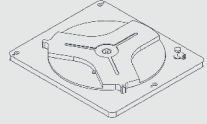
**HWC15V**  
Wafer chuck rot + vac 150 mm



**H146**  
Wafer chuck, 150 mm sprung

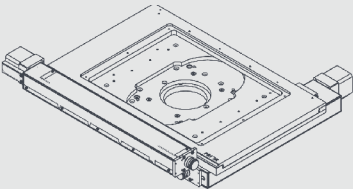


**H143**  
Wafer chuck spring loaded 3 in



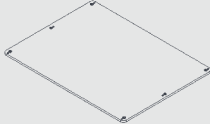
**HWC15S**  
Wafer chuck (4 in & 6 in wafers)

1
Stages

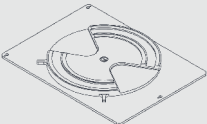


**H116/20L, HE16/20L**  
ProScan stage for up to 8 inch diameter wafers

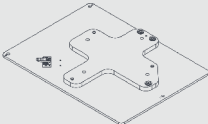
6
Sample holders




**H225**  
Glass stage plate assembly



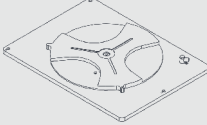
**HWC20S**  
Wafer chuck, rotating



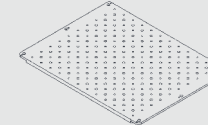
**H149, H149N**  
Wafer chuck



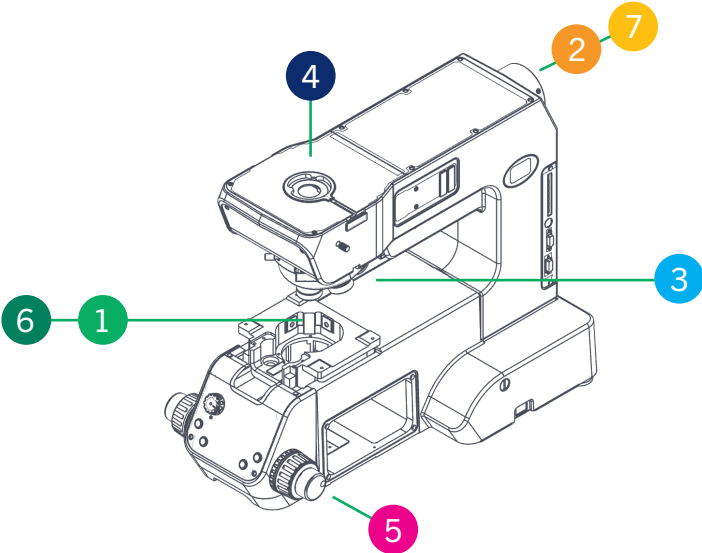
**H232**  
Aluminum stage plate assembly



**HWC20V**  
Wafer chuck, rotating, vacuum

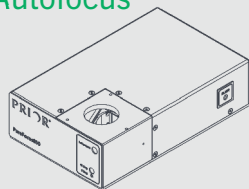


**H232B**  
Breadboard stage insert

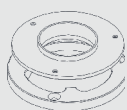




## 4 Autofocus

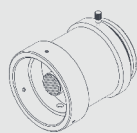


**PF850/PF850M**  
PF head, controller with  
digipot power supply, cables



**LF335**  
PF850 flange set

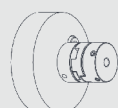
## 5 Motorized focus



**PS3H122R**  
Generic focus drive and  
adapter

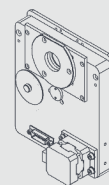


**H807**  
Focus sleeve



**H122KBIX**  
Direct fine focus coupling

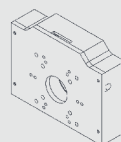
## 2 Excitation path



**HF108A**  
Filter wheel, 8 position,  
32 mm diameter filters

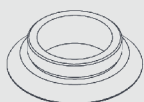


**HF235**  
Filter wheel adapter

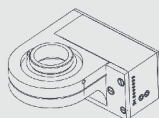


**HF204HT**  
35mm high temperature  
standalone shutter

## 3 Objective positioner



**QG-OP-MIC-RMS**  
Microscope adapter

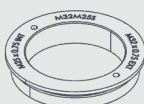


**QGOP-400-UP-D1**  
OP400 objective scanner  
system (0–500 g load)

**QGOP-400-UP-HL-D1**  
OP400 objective scanner  
system (500–1000 g load)

**QGOP-800-UP-D1**  
OP800 objective scanner  
system (0–500 g load)

**QGOP-800-UP-HL-D1**  
OP800 objective scanner  
system (500–1000 g load)

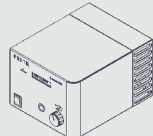


**QG-OP-OBJ-RMS**  
Objective adapter

## 7 Illumination



**L200SOL, L220SOL**  
Fluorescence illuminator,  
built in shutter



**L2000L, L2200L**  
Fluorescence illuminator

See the following pages for more product information.

# Evident/Olympus MX61/MX63 configuration guide

The Evident/Olympus MX61 and MX63 are motorized microscopes designed for semiconductor analysis.

## Stages and sample holders

The H105/20L, HE05/20L, H105N20L and H105E20L are also available for smaller wafers. The H105N20L and H105E20L feature a flat top design for easy loading. All sample holders listed are compatible with all types of stage. The HWC20V and HWC15V are fitted with a vacuum nozzle but no vacuum pump system is supplied. Please note that Prior Scientific stages are not compatible with the MX61-A.

## Motorized XY stages and sample holders for up to 6 inch diameter wafers

Part	Description
H105/20L	ProScan stage, 154x154 mm travel, part encoded, 2 mm pitch, 200 step, Evident/Olympus
HE05/20L	ProScan stage, 154x154 mm travel, encoded, 2 mm pitch, 200 step, Evident/Olympus
H105N20L	ProScan stage, 154x154 mm travel, non-encoded, 2 mm pitch, 200 step, Evident/Olympus
H105E20L	ProScan stage, 154x154 mm travel, encoded, 2 mm pitch, 200 step, Evident/Olympus
H227	H105 glass stage plate assembly
H231	H105 aluminum stage plate assembly
H231B	Breadboard stage insert assembly (H105)
H143	Wafer chuck spring loaded 3 inch
H146	Wafer chuck, 150 mm sprung, H105 stages
HWC15S	H105 wafer chuck (4" & 6" wafers)
HWC15V	Wafer chuck rot+vac 150 mm/H105

## Motorized XY stages and sample holders for up to 8 inch diameter wafers

Part	Description
H116/20L	ProScan stage, 255x215 mm travel, part encoded, 2 mm pitch, 200 step, Evident/Olympus
HE16/20L	ProScan stage, 255x215 mm travel, encoded, 2 mm pitch, 200 step, Evident/Olympus
H225	Glass stage plate 8 in x 8 in assembly
H232	H116 aluminum stage plate assembly
H232B	Breadboard stage insert assembly (H116)
H149	Wafer chuck, 200 mm sprung, H116 stages
H149N	Wafer chuck, 200 mm notched sprung, H116 stages
HWC20S	Wafer chuck, rotating, 150 mm/200 mm, H116 stages
HWC20V	Wafer chuck, rotating, vacuum, 200 mm, H116 stages

## Objective positioners and adapters

When ordering ensure the correct part number is used to specify upright calibration. Objective positioners require a threaded adapter in order to be fitted to the microscope nosepiece and the microscope objective. Evident/Olympus microscopes typically use RMS threads; please contact Prior Scientific if the nosepiece uses an alternative thread size. Some nosepieces have a raised lip surrounding the objective positions, which may clash with the objective positioner; a 15 mm spacer can be added to clear the lip. Please specify the nosepiece attachment fitted to the microscope when ordering. Please note that the two objective positions adjacent to the objective positioner will not be usable due to space constraints; additional positions may be unusable on smaller nosepieces. A high load calibration is available for specialist heavy objectives. Control of the objective positioner via Evident/Olympus Software requires the use of the Evident/Olympus Realtime Controller.

Part	Description
QGOP-400-UP-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-400-UP-HL-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QGOP-800-UP-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-800-UP-HL-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QG-OP-MIC-W26	Microscope adapter W26 x 0.706 (M26 x 1/36")
QG-OP-MIC-RMS	OP microscope adapter RMS
QG-OP-OBJ-W26	Objective adapter W26 x 0.706 (M26 x 1/36")
QG-OP-OBJ-RMS	OP objective adapter M32 x 0.75 to RMS
QG-OP-SPACE-RMS	RMS static objective spacer to align with OP-400 objective

## Motorized focus

The PS3H122R plus H807 combination is required to drive the fine focus knob of the microscope. The coarse focus will not be motorized. The H122KBIX direct coupling can be added for more precise motorized control.

Part	Description
PS3H122R	Generic focus drive and adapter with rotating cable system preventing cable twisting
H807	Evident/Olympus BX and IX focus sleeve
H122KBIX	Direct fine focus coupling for Evident/Olympus IX/BX microscopes

## Autofocus

The PF850 is a standalone hardware autofocus. The LF335 flange set is recommended for systems using only transmitted light or non-fluorescence reflected light. The PF200, PF209 and PF300 are required for setup and maintenance. The PF404 is required for use with piezo nanopositioning systems.

Part	Description
PF850	PF head, controller with digipot power supply, cables
PF850M	PF head - line mode, controller with digipot power supply, cables
LF335	PF850 flange set (Evident/Olympus BX)
PF209	PureFocus setup sample slide
PF200	PureFocus setup camera alignment target type 1, RMS.DIA 0.8 x 36
PF300	PureFocus setup camera jig
PF404	Piezo cable for PF850 15D to BNC

## Illumination

The L2000L and L200SOL are recommended for fluorescence microscopy (see **datasheet** for details). The L200SOL has a built in shutter mechanism which can be controlled via a ProScan III controller, so a stand alone shutter is not required. The L2200L and L220SOL are available for customers doing fluorescence imaging in the far-red.

Part	Description
L200SOL	L200 standard box, lamp, light guide, shutter and Evident/Olympus collimator
L2000L	L220 standard box, lamp, light guide and Evident/Olympus collimator
L220SOL	L220 standard box, lamp, light guide, shutter and Evident/Olympus collimator
L2200L	L220 standard box, lamp, light guide and Evident/Olympus collimator

## Excitation path

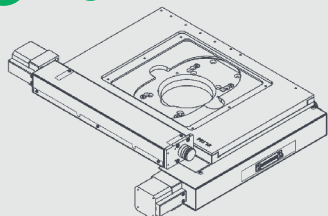
Filter wheels are not supplied with filters. Contact Prior Scientific if you wish to purchase a filter wheel stand that can be fixed to an optical table. For systems requiring a shutter and filter wheel it is recommended to buy one of the combinations listed above. The HF235 adapter is required for filter wheels and shutters in the episcopic illumination pathway.

Part	Description
HF235	Filter wheel adapter for Evident/Olympus BX, IX and AX series microscopes
HF204HT	35 mm high temperature standalone shutter
HF108A	Filter wheel, 8 position, 32 mm diameter filters without stand
HF108	Filter wheel, 8 position, 32 mm diameter filters with stand
HF108A + HF201HT	8 position 32 mm diameter filter wheel plus shutter combination

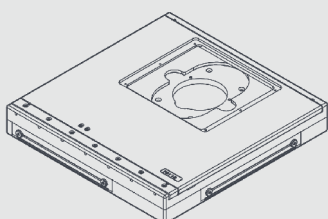


# Evident/Olympus MX61L/MX63L configuration chart

## 1 Stages

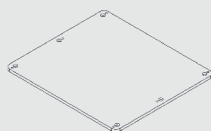


**H105/20L, HE05/20L**  
ProScan stage for up to 6 inch diameter wafers

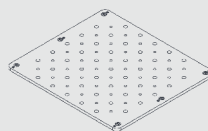


**H105N20L, H105E20L**  
ProScan stage for up to 6 inch diameter wafers

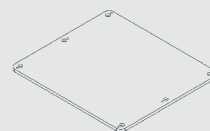
## 6 Sample holders



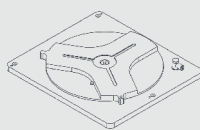
**H227**  
Glass stage plate assembly



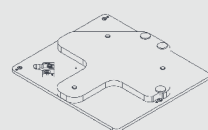
**H231B**  
Breadboard stage insert assembly



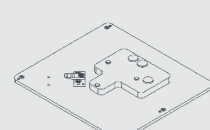
**H231**  
Aluminum stage plate assembly



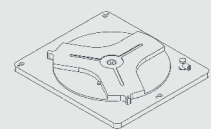
**HWC15V**  
Wafer chuck rot + vac 150 mm



**H146**  
Wafer chuck, 150 mm sprung

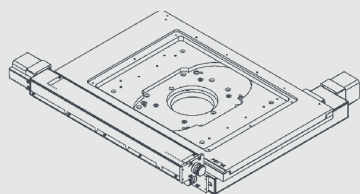


**H143**  
Wafer chuck spring loaded 3 in



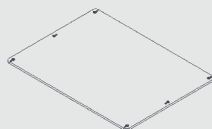
**HWC15S**  
Wafer chuck (4 in & 6 in wafers)

## 1 Stages

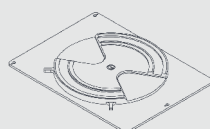


**H116/20L, HE16/20L**  
ProScan stage for up to 8 inch diameter wafers

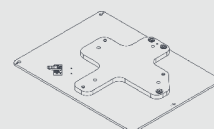
## 6 Sample holders



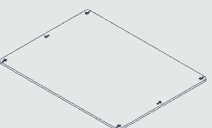
**H225**  
Glass stage plate assembly



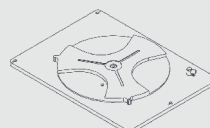
**HWC20S**  
Wafer chuck, rotating



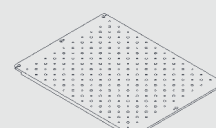
**H149, H149N**  
Wafer chuck



**H232**  
Aluminum stage plate assembly

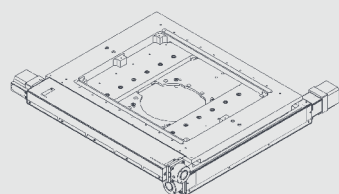


**HWC20V**  
Wafer chuck, rotating



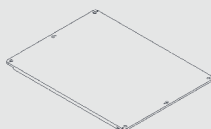
**H232B**  
Breadboard stage insert

## 1 Stages

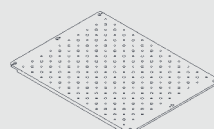


**H112/2ST, HE12/2ST**  
ProScan stage, 302 x 302 mm travel, part encoded, 2 mm pitch, 200 step

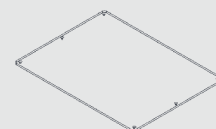
## 6 Sample holders



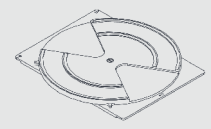
**H233**  
Aluminum stage plate assembly



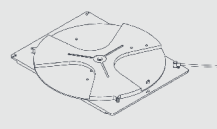
**H233B**  
Breadboard stage insert assembly



**H221**  
Glass stage plate assembly

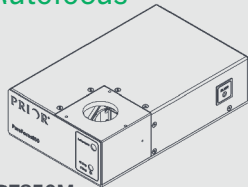


**HWC30S**  
Stepped wafer chuck 300D



**HWC30V**  
300 mm vacuum wafer chuck

### 3 Autofocus

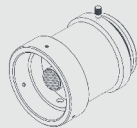


**PF850/PF850M**  
PF head, controller with  
digipot power supply, cables



**LF335**  
PF850 flange set

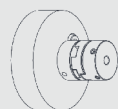
### 4 Motorized focus



**PS3H122R**  
Generic focus drive and  
adapter

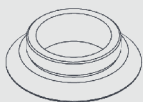


**H807**  
Focus sleeve

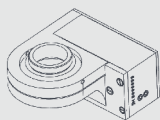


**H122KBIX**  
Direct fine focus coupling

### 2 Objective positioner



**QG-OP-MIC-RMS**  
Microscope adapter

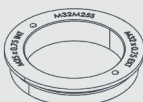


**QGOP-400-UP-D1**  
OP400 objective scanner  
system (0–500 g load)

**QGOP-400-UP-HL-D1**  
OP400 objective scanner  
system (500–1000 g load)

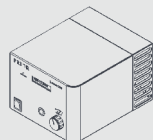
**QGOP-800-UP-D1**  
OP800 objective scanner  
system (0–500 g load)

**QGOP-800-UP-HL-D1**  
OP800 objective scanner  
system (500–1000 g load)



**QG-OP-OBJ-RMS**  
Objective adapter

### 5 Illumination

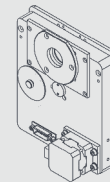


**L200SOL, L220SOL**  
Fluorescence illuminator,  
built in shutter

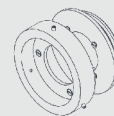


**L2000L, L2200L**  
Fluorescence illuminator

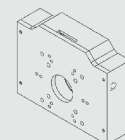
### 7 Excitation path



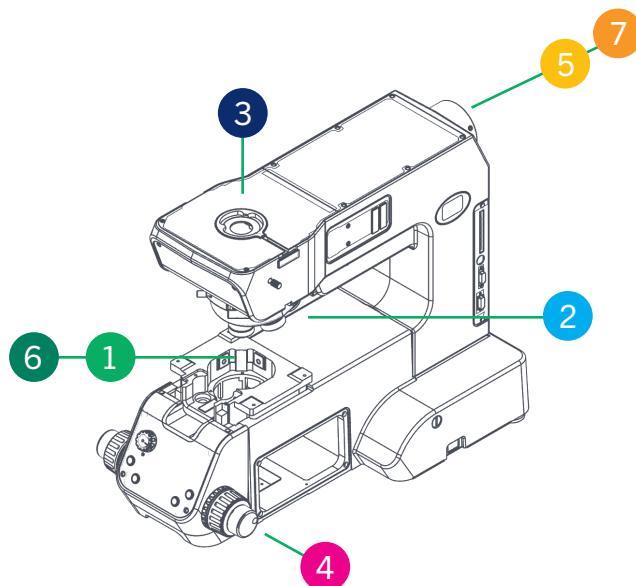
**HF108A**  
Filter wheel, 8 position,  
32 mm diameter filters



**HF235**  
Filter wheel adapter



**HF204HT**  
35mm high temperature  
standalone shutter



See the following pages for more product information.

# Evident/Olympus MX61L/ MX63L configuration guide

The Evident/Olympus MX61L and MX63L are a motorized microscope designed for semiconductor analysis.

## Stages and sample holders

The H112/2ST and HE12/2ST are the largest stages available for this microscope due to its throat size and can take up to 12 inch wafers. The H116/2OL and HE16/2OL are available for up to 8 inch wafers. The H105/2OL, HE05/2OL, H105N2OL and H105E2OL are also available for smaller wafers. The H105N2OL and H105E2OL feature a flat top design for easy loading. All sample holders listed are compatible with all types of stage. The HWC30V, HWC20V and HWC15V are fitted with a vacuum nozzle but no vacuum pump system is supplied. Please note that Prior Scientific stages are not compatible with the MX61L-A.

## Motorized XY stages and sample holders for up to 6 inch diameter wafers

Part	Description
H105/2OL	ProScan stage, 154x154 mm travel, part encoded, 2 mm pitch, 200 step, Evident/Olympus
HE05/2OL	ProScan stage, 154x154 mm travel, encoded, 2 mm pitch, 200 step, Evident/Olympus
H105N2OL	ProScan stage, 154x154 mm travel, non-encoded, 2 mm pitch, 200 step, Evident/Olympus
H105E2OL	ProScan stage, 154x154 mm travel, encoded, 2 mm pitch, 200 step, Evident/Olympus
H227	H105 glass stage plate assembly
H231	H105 aluminum stage plate assembly
H231B	Breadboard stage insert assembly (H105)
H143	Wafer chuck spring loaded 3 in
H146	Wafer chuck, 150 mm sprung, H105 stages
HWC15S	H105 wafer chuck (4" & 6" wafers)
HWC15V	Wafer chuck rot+vac 150 mm/H105

## Motorized XY stages and sample holders for up to 8 inch diameter wafers

Part	Description
H116/2OL	ProScan stage, 255x215 mm travel, part encoded, 2 mm pitch, 200 step, Evident/Olympus
HE16/2OL	ProScan stage, 255x215 mm travel, encoded, 2 mm pitch, 200 step, Evident/Olympus
H225	Glass stage plate 8 in x 8 in assembly
H232	H116 aluminum stage plate assembly
H232B	Breadboard stage insert assembly (H116)
H149	Wafer chuck, 200 mm sprung, H116 stages
H149N	Wafer chuck, 200 mm notched sprung, H116 stages
HWC20S	Wafer chuck, rotating, 150 mm/200 mm, H116 stages
HWC20V	Wafer chuck, rotating, vacuum, 200 mm, H116 stages



## Motorized XY stages and sample holders for up to 12 inch diameter wafers

Part	Description
H112/2ST	ProScan stage, 154 x 154 mm travel, part encoded, 2 mm pitch, 200 step
HE12/2ST	ProScan stage, 154 x 154 mm travel, part encoded, 2 mm pitch, 200 step
H233	Aluminum stage plate assembly
H233B	Breadboard stage insert assembly
H221	Glass stage plate assembly
HWC30S	Stepped wafer chuck 300D
HWC30V	300 mm vacuum wafer chuck

## Objective positioners and adapters

When ordering ensure the correct part number is used to specify upright calibration. Objective positioners require a threaded adapter in order to be fitted to the microscope nosepiece and the microscope objective. Evident/Olympus microscopes typically use RMS threads; please contact Prior Scientific if the nosepiece uses an alternative thread size. Some nosepieces have a raised lip surrounding the objective positions, which may clash with the objective positioner; a 15mm spacer can be added to clear the lip. Please specify the nosepiece attachment fitted to the microscope when ordering. Please note that the two objective positions adjacent to the objective positioner will not be usable due to space constraints; additional positions may be unusable on smaller nosepieces. A high load calibration is available for specialist heavy objectives. Control of the objective positioner via Evident/Olympus Software requires the use of the Evident/Olympus Realtime Controller.

Part	Description
QGOP-400-UP-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-400-UP-HL-D1	OP400 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QGOP-800-UP-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (0-500 g load)
QGOP-800-UP-HL-D1	OP800 objective scanner system incl. NPC-D-6110 controller for inverted microscopes (500-1000 g load)
QG-OP-MIC-W26	OP microscope adapter W26 x 0.706 (M26 x 1/36")
QG-OP-MIC-RMS	OP microscope adapter RMS
QG-OP-OBJ-W26	OP objective adapter W26 x 0.706 (M26 x 1/36")
QG-OP-OBJ-RMS	OP objective adapter M32 x 0.75 to RMS
QG-OP-SPACE-RMS	RMS static objective spacer to align with OP-400 objective

## Motorized focus

The PS3H122R plus H807 combination is required to drive the fine focus knob of the microscope. The coarse focus will not be motorized. The H122KBIX direct coupling can be added for more precise motorized control.

Part	Description
PS3H122R	Generic focus drive and adapter with rotating cable system preventing cable twisting
H807	Evident/Olympus BX and IX focus sleeve
H122KBIX	Direct fine focus coupling for Evident/Olympus IX/BX microscopes

## Autofocus

The PF850 is a stand alone hardware autofocus. The LF335 flange set is recommended for systems using only transmitted light or non-fluorescence reflected light. The PF200, PF209 and PF300 are required for setup and maintenance. The PF404 is required for use with piezo nanopositioning systems.

Part	Description
PF850	PF head, controller with digipot power supply, cables
PF850M	PF head - line mode, controller with digipot power supply, cables
PLF335	PF850 flange set (Evident/Olympus BX)
PF209	PureFocus setup sample slide
PF200	PureFocus setup camera alignment target type 1, RMS.DIA 0.8 x 36
PF300	PureFocus setup camera jig
PF404	Piezo cable for PF850 15D to BNC

## Illumination

The L200OL and L200SOL are recommended for fluorescence microscopy (see **datasheet** for details). The L200SOL has a built in shutter mechanism which can be controlled via a ProScan III controller, so a stand alone shutter is not required. The L220OL and L220SOL are available for customers doing fluorescence imaging in the far-red.

Part	Description
L200SOL	L200 standard box, lamp, light guide, shutter and Evident/Olympus collimator
L200OL	L220 standard box, lamp, light guide and Evident/Olympus collimator
L220SOL	L220 standard box, lamp, light guide, shutter and Evident/Olympus collimator
L220OL	L220 standard box, lamp, light guide and Evident/Olympus collimator

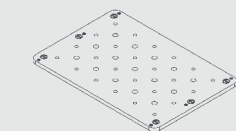
## Excitation path

Filter wheels are not supplied with filters. Contact Prior Scientific if you wish to purchase a filter wheel stand that can be fixed to an optical table. For systems requiring a shutter and filter wheel it is recommended to buy one of the combinations listed above. The HF235 adapter is required for filter wheels and shutters in the episcopic illumination pathway.

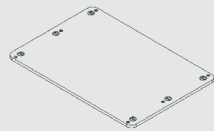
Part	Description
HF235	Filter wheel adapter for Evident/Olympus BX, IX and AX series microscopes
HF204HT	35 mm high temperature standalone shutter
HF108A	Filter wheel, 8 position, 32 mm diameter filters without stand
HF108	Filter wheel, 8 position, 32 mm diameter filters with stand
HF108A + HF201HT	8 position 32 mm diameter filter wheel plus shutter combination

# Evident/Olympus MVX10 configuration chart

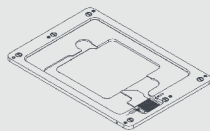
## 6 Sample holders



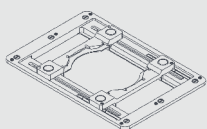
**H230B**  
Breadboard insert plate



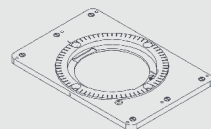
**H230**  
Solid stage plate



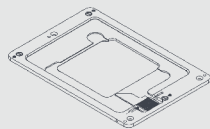
**H224LP**  
Low profile 3 in x 1 in slide holder



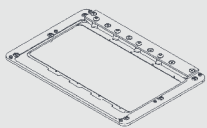
**H473UP**  
Universal sample holder



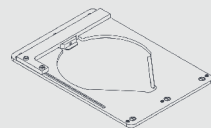
**H224ROT**  
3 in x 1 in manual rotating slide holder



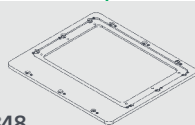
**H237LP**  
Low profile 3 in x 1 in slide holder



**H234LP**  
Low profile, four 3 in x 1 in slide holder

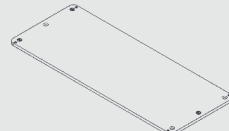


**H229UP**  
Universal Petri dish holder

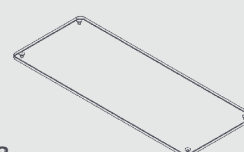


**H3848**  
Low profile slide holder adapter kit

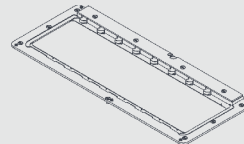
## 6 Sample holders



**H239**  
Solid stage plate

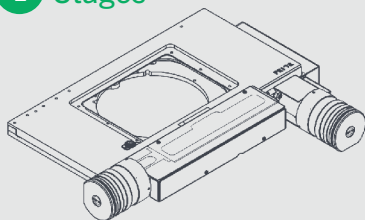


**H288**  
Glass stage plate



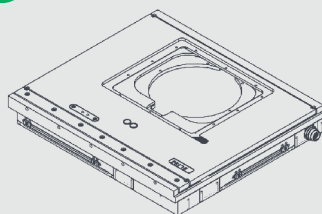
**H238LP**  
Low profile eight 3 in x 1 in slide holder

## 1 Stages



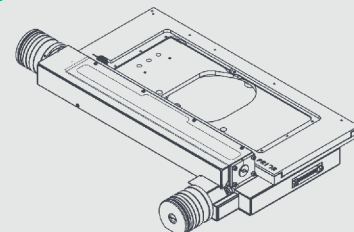
**H101BX, HE01BX,  
H1P4BX, HEP4BX**  
Proscan upright stage

## 1 Stages



**H101P2BX, H101E2BX,  
H101P1BX, H101E1BX**  
Proscan upright stage, flat top

## 1 Stages

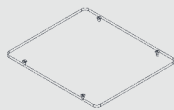


**H138BX, HE38BX**  
Proscan upright stage, large format

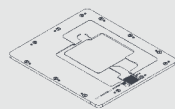
## 6 Stage accessories



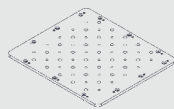
**H230F**  
Solid stage plate



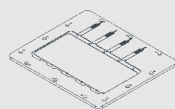
**H220F**  
Glass stage plate



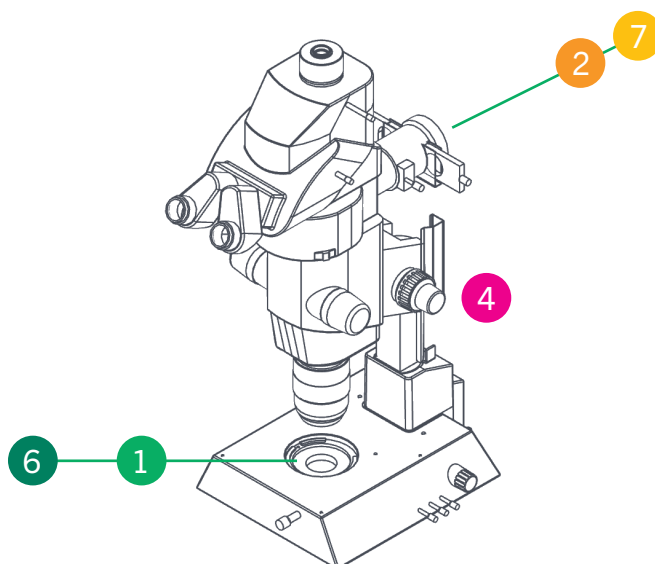
**H224F**  
Low profile 3 in x 1 in slide holder



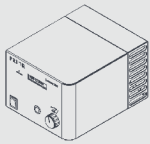
**H230FB**  
Breadboard stage insert assembly



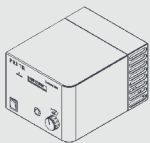
**H234F**  
Four 3 in x 1 in slide holder



## 7 Illumination

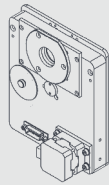


**L200SOL, L220SOL**  
Fluorescence illuminator,  
built in shutter

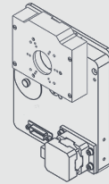


**L2000L, L2200L**  
Fluorescence illuminator

## 2 Excitation path



**HF110A**  
Filter wheel, 10 position,  
25 mm diameter filters



**HF110A + HF200HT**  
10 position 25 mm diameter  
filter wheel plus shutter  
combination

**HF110**  
Filter wheel, 10 position,  
25 mm diameter filters with stand

**HF108A + HF201HT**  
8 position 32 mm diameter  
filter wheel plus shutter  
combination

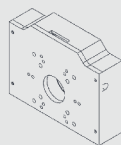
**HF106A**  
Filter wheel, 6 position,  
25 mm diameter filters



**HF108A**  
Filter wheel, 8 position,  
32 mm diameter filters

**HF108**  
Filter wheel, 8 position,  
32 mm diameter filters with stand

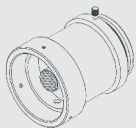
**HF235**  
Filter wheel adapter



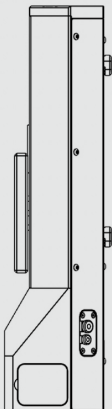
**HF202HT**  
25mm high temperature  
stand alone shutter

**HF204HT**  
35mm high temperature  
stand alone shutter

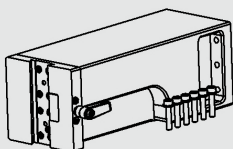
## 4 Motorized focus



**PS3H122SZX2**  
Generic focus drive and  
adapter



**H275LMT, H275LMTE**  
Extended motorized focus towers



**H275LMVX**  
Adapter arm for MVX optics

See the following pages for more product information.

# Evident/Olympus MVX10 configuration guide

The Evident/Olympus MVX10 is an advanced stereo microscope. Prior are able to supply stages and illumination upgrades for this microscope.

## Stages and sample holders

All the sample holders listed in the first section of the above table are compatible with the H101BX, HE01BX, H1P4BX, and HEP4BX. All the sample holders listed in the second section are compatible with the flat top H101P2BX, H101E2BX, H101P1BX and H101E1BX. In addition, sample holders from the first section are compatible with the flat top stage range when combined with the H3848. The large format H138BX and HE38BX can support up to 8 slides. All stages require the SZX-STAD2 or M-SA-SZX adapter from Evident/Olympus to be fitted.

## Motorized XY stages and sample holders

Part	Description
H101BX	Proscan upright stage, part encoded, 2 mm pitch, 200 step, Evident/Olympus BX
HE01BX	Proscan upright stage, encoded, 2 mm pitch, 200 step, Evident/Olympus BX
H1P4BX	Proscan upright stage, part encoded, 1 mm pitch, 400 step, Evident/Olympus BX
HEP4BX	Proscan upright stage, encoded, 1 mm pitch, 400 step, Evident/Olympus BX
H473UP	Universal sample holder (slides, Petri dishes, small flasks), upright
H224LP	Low profile 3 in x 1 in slide holder
H234LP	Low profile, four 3 in x 1 in slide holder
H237LP	Low profile 3 in x 2 in slide holder
H229UP	Universal Petri dish holder, upright stages, up to 90 mm diameter
H230	Solid stage plate, H101A stages
H224ROT	3 in x 1 in manual rotating slide holder
H230B	Breadboard insert plate M4 & M6 (H101)
H220	H101 Glass stage plate assembly

## Flat top XY motorized stages and sample holders

Part	Description
H101P2BX	Proscan upright stage, flat top, part encoded, 2 mm pitch, 200 step, Evident/Olympus BX
H101E2BX	Proscan upright stage, flat top, encoded, 2 mm pitch, 200 step, Evident/Olympus BX
H101P1BX	Proscan upright stage, flat top, 1 mm pitch, 200 step, Evident/Olympus BX
H101E1BX	Proscan upright stage, flat top, encoded, 1 mm pitch, 200 step, Evident/Olympus BX
H3848	Low profile slide holder adapter kit for H101F
H230F	Solid stage plate, H101F Stages
H224F	Low profile 3 in x 1 in slide holder, extended, H101F stages
H234F	Four 3 in x 1 in slide holder, H101F stages
H220F	Glass stage plate, H101F stages
H230FB	Breadboard stage insert assembly (H101F)

## Large format XY motorized stages and sample holders

Part	Description
H138BX	Proscan upright stage, part encoded, 2 mm pitch, 200 step, Evident/Olympus BX, for up to 8 slides
HE38BX	Proscan upright stage, encoded, 2 mm pitch, 200 step, Evident/Olympus BX, for up to 8 slides
H238LP	Low profile eight 3 in x 1 in slide holder
H238PLP	Low profile eight 3in x 1in slide holder, part recessed
H239	Solid stage plate, H138 stages
H288	Glass stage plate, H138 stages

## Motorized focus

The PS3H122SZX2 couples indirectly to the SZX-FOFH focus unit via a friction pad. The H275LMT and H275LMT can be used to translate the entire MVX10 head using the H275LMVX in combination with the MVX-ZB10 zoom body. Please note that when using the H275LMT and H275LMTE, it is possible to use much larger stages with the MVX10 than indicated in this section of the sales guide.

Part	Description
PS3H122SZX2	Generic focus drive and adapter with rotating cable system preventing cable twisting
H275LMT	Extended motorized focus tower
H275LMTE	Extended motorized focus tower, encoded
H275LMVX	Adapter arm for MVX optics

## Illumination

The L200OL and L200SOL are recommended for fluorescence microscopy (see **datasheet** for details). The L200SOL has a built in shutter mechanism which can be controlled via a ProScan III controller, so a standalone shutter is not required. The L220OL and L220SOL are available for customers doing fluorescence imaging in the far-red.

Part	Description
L200SOL	L200 Standard box, lamp, light guide, shutter and Evident/Olympus collimator
L200OL	L220 Standard box, lamp, light guide and Evident/Olympus collimator
L220SOL	L220 Standard box, lamp, light guide, shutter and Evident/Olympus collimator
L220OL	L220 Standard box, lamp, light guide and Evident/Olympus collimator

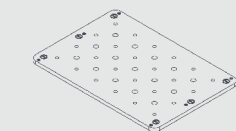
## Excitation path

Filter wheels are not supplied with filters. Contact Prior Scientific if you wish to purchase a filter wheel stand that can be fixed to an optical table. For systems requiring a shutter and filter wheel it is recommended to buy one of the combinations listed above. The HF235 adapter is required for filter wheels and shutters in the diascopic illumination pathways.

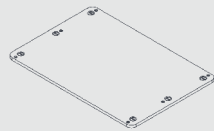
Part	Description
HF235	Filter wheel adapter for Evident/Olympus BX, IX and AX series microscopes
HF202HT	25 mm high temperature standalone shutter
HF204HT	35 mm high temperature standalone shutter
HF110A	Filter wheel, 10 position, 25 mm diameter filters without stand
HF110	Filter wheel, 10 position, 25 mm diameter filters with stand
HF106A	Filter wheel, 6 position, 25 mm diameter filters with stand
HF108A	Filter wheel, 8 position, 32 mm diameter filters without stand
HF108	Filter wheel, 8 position, 32 mm diameter filters with stand
HF110A + HF200HT	10 position 25 mm diameter filter wheel plus shutter combination
HF108A + HF201HT	8 position 32 mm diameter filter wheel plus shutter combination

# Evident/Olympus SZX series configuration chart

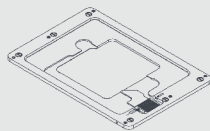
## 6 Sample holders



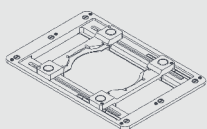
**H230B**  
Breadboard insert plate



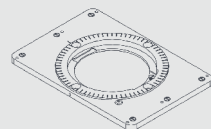
**H230**  
Solid stage plate



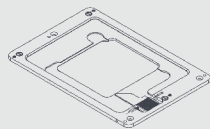
**H224LP**  
Low profile 3 in x 1 in slide holder



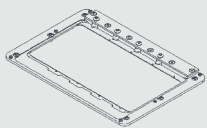
**H473UP**  
Universal sample holder



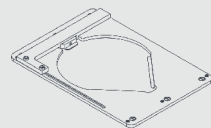
**H224ROT**  
3 in x 1 in manual rotating slide holder



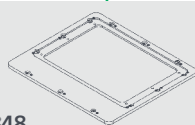
**H237LP**  
Low profile 3 in x 1 in slide holder



**H234LP**  
Low profile, four 3 in x 1 in slide holder

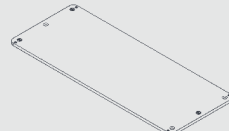


**H229UP**  
Universal Petri dish holder

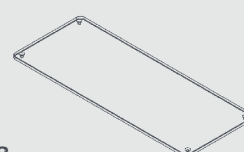


**H3848**  
Low profile slide holder adapter kit

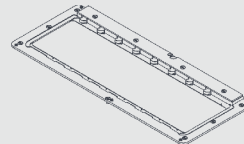
## 6 Sample holders



**H239**  
Solid stage plate

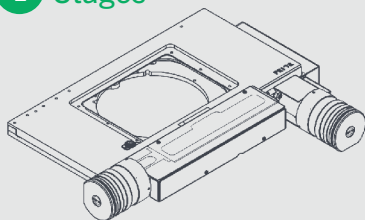


**H288**  
Glass stage plate



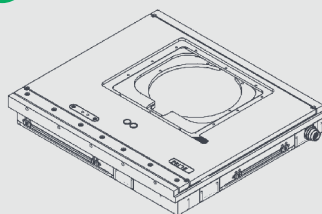
**H238LP**  
Low profile eight 3 in x 1 in slide holder

## 1 Stages



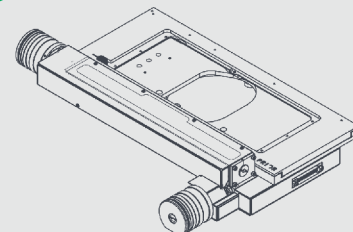
**H101BX, HE01BX,  
H1P4BX, HEP4BX**  
ProScan upright stage

## 1 Stages



**H101P2BX, H101E2BX,  
H101P1BX, H101E1BX**  
ProScan upright stage, flat top

## 1 Stages

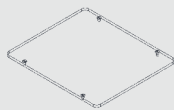


**H138BX, HE38BX**  
ProScan upright stage, large format

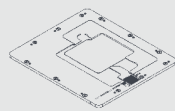
## 6 Stage accessories



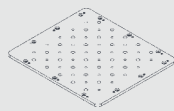
**H230F**  
Solid stage plate



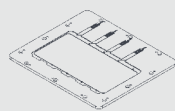
**H220F**  
Glass stage plate



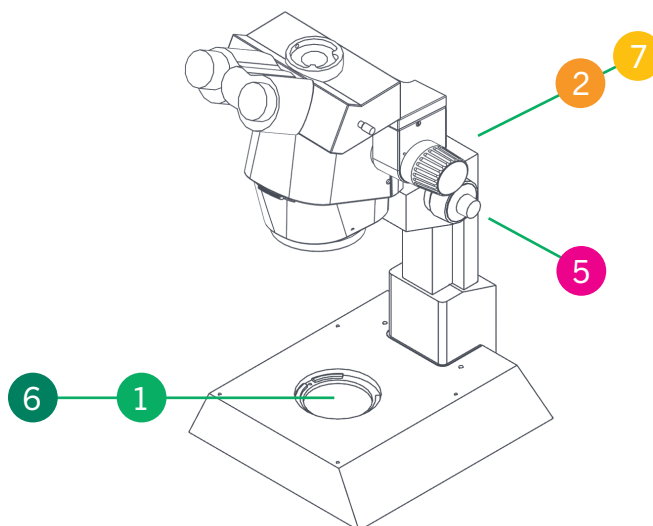
**H224F**  
Low profile 3 in x 1 in slide holder



**H230FB**  
Breadboard stage insert assembly



**H234F**  
Four 3 in x 1 in slide holder



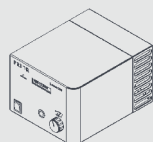


## 5 Motorized focus

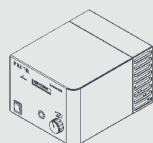


**PS3H122SZX  
PS3H122SZX2**  
ZX focus drive and adapter

## 7 Illumination

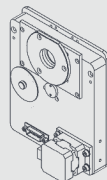


**L200SOL, L220SOL**  
Fluorescence illuminator,  
built in shutter



**L2000L, L2200L**  
Fluorescence illuminator

## 2 Excitation path



**HF110A**  
Filter wheel, 10 position,  
25 mm diameter filters

**HF110**  
Filter wheel, 10 position,  
25 mm diameter filters with stand

**HF106A**  
Filter wheel, 6 position,  
25 mm diameter filters

**HF108A**  
Filter wheel, 8 position,  
32 mm diameter filters

**HF108**  
Filter wheel, 8 position,  
32 mm diameter filters with stand

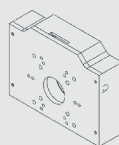


**HF110A + HF200HT**  
10 position 25 mm diameter  
filter wheel plus shutter  
combination

**HF108A + HF201HT**  
8 position 32 mm diameter  
filter wheel plus shutter  
combination



**HF235**  
Filter wheel adapter



**HF202HT**  
25mm high temperature  
standalone shutter

**HF204HT**  
35mm high temperature  
standalone shutter

See the following pages for more product information.

# Evident/Olympus SZX configuration guide

The Evident/Olympus SZX is an advanced stereo microscope. Prior are able to supply stages and illumination upgrades for this microscope.

## Stages and sample holders

All the sample holders listed in the first section of the above table are compatible with the H101BX, HE01BX, H1P4BX, and HEP4BX. All the sample holders listed in the second section are compatible with the flat top H101P2BX, H101E2BX, H101P1BX and H101E1BX. In addition, sample holders from the first section are compatible with the flat top stage range when combined with the H3848. The large format H138BX and HE38BX can support up to 8 slides. All stages require the SZX-STAD2 adapter from Evident/Olympus to be fitted.

## Motorized XY stages and sample holders

Part	Description
H101BX	ProScan upright stage, part encoded, 2 mm pitch, 200 step, Evident/Olympus BX
HE01BX	ProScan upright stage, encoded, 2 mm pitch, 200 step, Evident/Olympus BX
H1P4BX	ProScan upright stage, part encoded, 1 mm pitch, 400 step, Evident/Olympus BX
HEP4BX	ProScan upright stage, encoded, 1 mm pitch, 400 step, Evident/Olympus BX
H473UP	Universal sample holder (slides, Petri dishes, small flasks), upright
H224LP	Low profile 3 in x 1 in slide holder
H234LP	Low profile, four 3 in x 1 in slide holder
H237LP	Low profile 3 in x 2 in slide holder
H229UP	Universal Petri dish holder, upright stages, up to 90 mm diameter
H230	Solid stage plate, H101A stages
H224ROT	3 in x 1 in manual rotating slide holder
H230B	Breadboard insert plate M4 & M6 (H101)
H220	H101 glass stage plate assembly

## Flat top XY motorized stages and sample holders

Part	Description
H101P2BX	ProScan upright stage, flat top, part encoded, 2 mm pitch, 200 step, Evident/Olympus BX
H101E2BX	ProScan upright stage, flat top, encoded, 2 mm pitch, 200 step, Evident/Olympus BX
H101P1BX	ProScan upright stage, flat top, 1 mm pitch, 200 step, Evident/Olympus BX
H101E1BX	ProScan upright stage, flat top, encoded, 1 mm pitch, 200 step, Evident/Olympus BX
H3848	Low profile slide holder adapter kit for H101F
H230F	Solid stage plate, H101F Stages
H224F	Low profile 3 in x 1 in slide holder, extended, H101F stages
H234F	Four 3 in x 1 in slide holder, H101F stages
H220F	Glass stage plate, H101F stages
H230FB	Breadboard stage insert assembly (H101F)

## Large format XY motorized stages and sample holders

Part	Description
H138BX	ProScan upright stage, part encoded, 2 mm pitch, 200 step, Evident/Olympus BX, for up to 8 slides
HE38BX	ProScan upright stage, encoded, 2 mm pitch, 200 step, Evident/Olympus BX, for up to 8 slides
H238LP	Low profile eight 3 in x 1 in slide holder
H238PLP	Low profile eight 3 in x 1 in slide holder, part recessed
H239	Solid stage plate, H138 stages
H288	Glass stage plate, H138 stages

## Motorized focus

Both the PS3H122SZX and PS3H122SZX2 focus systems couple indirectly to the fine focus knob of the microscope via a friction pad. The SZX is compatible with the SZX7, SZX9 and SZX12. The SZX2 is compatible with the SZX10 and SZX16. SZX microscopes must be fitted with a fine focus actuator for a Prior motorized focus to be added.

Part	Description
PS3H122SZX	Focus drive assembly, PS3, Evident/Olympus SZX 7/9/12
PS3H122SZX2	Focus drive assembly, PS3, Evident/Olympus SZX 10/16

## Illumination

The L200OL and L200SOL are recommended for fluorescence microscopy (see **datasheet** for details). The L200SOL has a built in shutter mechanism which can be controlled via a ProScan III controller, so a standalone shutter is not required. The L220OL and L220SOL are available for customers doing fluorescence imaging in the far-red. Addition of these illuminators requires the SZX-RFA, SZX-RFA2-16 or SZX-RFA2-16A fluorescence illuminator.

Part	Description
L200SOL	L200 standard box, lamp, light guide, shutter and Evident/Olympus collimator
L200OL	L220 standard box, lamp, light guide and Evident/Olympus collimator
L220SOL	L220 standard box, lamp, light guide, shutter and Evident/Olympus collimator
L220OL	L220 standard box, lamp, light guide and Evident/Olympus collimator

## Excitation path

Filter wheels are not supplied with filters. Contact Prior Scientific if you wish to purchase a filter wheel stand that can be fixed to an optical table. For systems requiring a shutter and filter wheel it is recommended to buy one of the combinations listed above. The HF260 adapter is required for filter wheels and shutters in the episcopic illumination pathway.

Part	Description
HF260	Filter wheel adapter for Evident/Olympus BX, IX and AX series microscopes
HF202HT	25 mm high temperature standalone shutter
HF204HT	35 mm high temperature standalone shutter
HF110A	Filter wheel, 10 position, 25 mm diameter filters without stand
HF110	Filter wheel, 10 position, 25 mm diameter filters with stand
HF106A	Filter wheel, 6 position, 25 mm diameter filters without stand
HF108A	Filter wheel, 8 position, 32 mm diameter filters without stand
HF108	Filter wheel, 8 position, 32 mm diameter filters with stand
HF110A + HF200HT	10 position 25 mm diameter filter wheel plus shutter combination
HF108A + HF201HT	8 position 32 mm diameter filter wheel plus shutter combination

# Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

# PRIOR<sup>®</sup>

Scientific

 [prior.com](https://prior.com)  
 [linkedin.com/company/prior-scientific](https://linkedin.com/company/prior-scientific)  
 [@PriorScientific](https://twitter.com/PriorScientific)

## UNITED KINGDOM

Prior Scientific Instruments Ltd.  
Units 3-4 Fielding Industrial Estate  
Wilbraham Road, Fulbourn  
Cambridge, CB21 5ET  
United Kingdom  
**Email:** [inquiries@prior.com](mailto:inquiries@prior.com)  
**Phone:** +44 (0)1223 881711

## U.S.A.

Prior Scientific, Inc.  
80 Reservoir Park Drive  
Rockland, MA. 02370  
U.S.A.  
**Email:** [info@prior.com](mailto:info@prior.com)  
**Phone:** 781.878.8442

## GERMANY

Prior Scientific Instruments GmbH  
Maria-Pawlowna-Str. 4  
D-07743, Jena, Germany  
**Email:** [jena@prior.com](mailto:jena@prior.com)  
**Phone:** +49 (0) 3641 24 20 10

## JAPAN

Prior Scientific KK  
Kayabacho 3rd Nagaoka Bldg 10F,  
2-7-10, Nihonbashi Kayabacho, Chuo-Ku,  
Tokyo103-0025, Japan  
**Email:** [info-japan@prior.com](mailto:info-japan@prior.com)  
**Phone:** 03-5652-8831

## CHINA

Prior Scientific Instruments (Suzhou) Ltd.  
Room 1812, Honghai Building,  
72 Xingdu Street,  
Suzhou Industrial Park,  
Suzhou, 215000, China  
**Email:** [info-china@prior.com](mailto:info-china@prior.com)  
**Phone:** +86 (0)512 6617 5866



FM 61600



Copyright © 2023 by Prior Scientific Limited, United Kingdom.  
Subject to changes without notice.  
Evident/Olympus SALES GUIDE-V3.1-0224-EN-US